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PRIMARY PRODUCTS OCCUPATIONS

MAJOR GROUPS

- | | |
|----|------------------------------------------------|
| 71 | farming, horticultural
and animal-husbandry |
| 73 | fishing and trapping |
| 75 | forestry and logging |
| 77 | mining and quarrying
including oil and gas |

Canadian
Classification and
Dictionary of
Occupations

1978



Employment and
Immigration Canada

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IMPORTANT NOTICE

It is essential that this book always be used in conjunction with the CCDO GUIDE.* Only in the GUIDE will the key to the entire CCDO System be found. The GUIDE explains in detail all characteristics pertinent to the classification structure, and the treatment of special groups, titles and definitions. Worker traits such as aptitudes, interests and temperaments are explained, as is a worker's relationship to Data, People and Things functions. Work characteristics such as General Educational Development (GED), Specific Vocational Preparation (SVP), Physical Activities (PA) and Environmental Conditions (EC) are also described. An extensive alphabetical index of both job and occupational titles is included as well as an index of industry designations and their definitions.

*CCDO GUIDE. Published annually and available from the Printing and Publishing Centre, Department of Supply and Services, Ottawa, Ontario, K1A 0S9, or their agents across Canada.

INTRODUCTION

The Canadian Classification and Dictionary of Occupations (CCDO) was initially published in 1971 by the Department of Manpower and Immigration in consultation with Statistics Canada. The CCDO is a taxonomic structure which classifies and defines occupational activity in the Canadian world of work.

The world of work, however, is not a static force, and the degree of change since the first publication of CCDO has resulted in the commencement of a program for its progressive revision. Related groups of occupations are now being published in separate book form, rather than forming a part of a single, large volume. This present book, which classifies and defines the Primary Products Occupations (Major Group 71 — Farming, Horticultural and Animal-Husbandry Occupations; Major Group 73 — Fishing, Trapping and Related Occupations; Major Group 75 — Forestry and Logging Occupations; and Major Group 77 — Mining and Quarrying Including Oil and Gas Field Occupations), is the third in a series of about 10 such books. The change in format reflects a certain degree of economy and convenience, and further revisions have been

made to ensure the continuing useability of the CCDO. In addition to the above books, the CCDO GUIDE, which includes a comprehensive Introduction to the CCDO and a complete alphabetical index of both CCDO and job titles, will be published annually to keep users up-to-date.

Studies have been carried out across Canada to identify and define occupations which have emerged since the CCDO was first published. Existing occupational definitions have been revised and updated, and some occupations have been deleted because they no longer exist. CCDO titles previously considered to be sex-discriminatory have been deleted or amended to remove any possible bias. While these titles have been included in the Index to assist users in matching old titles with amended titles, their inclusion does not infer their official recognition by CCDO. The concept of expressing the requirements of an occupation in terms of aptitudes, interests and temperaments has been borrowed from the 1971 edition of CCDO Volume 2. These factors form part of a complete Qualifications Profile, and their inclusion with the occupational descriptions greatly extends the usefulness of each book of occupations.

SPECIAL NOTICE

In determining the data for inclusion in this publication, many jobs were examined and analyzed to determine their contents. No facts were collected, however, on such matters as hours of labour, wages or salaries, or other related employment practices.

As the content of specific jobs varies with each individual establishment, most of the occupational definitions are described in broad terms. For these reasons, the data in this publication cannot be considered as standards for setting working conditions, pay scales or related employment conditions, and the Canada Employment and Immigration Commission accepts no responsibility for the setting of these or other jurisdictional matters.

It is to be noted that the presence or absence of Physical Activities (PA) factors in a CCDO occupational definition is not to be misconstrued as indicating that the physically handicapped can or cannot perform the duties of that occupation.

THE CCDO STRUCTURE BY MAJOR GROUP

- 11 Managerial, Administrative and Related Occupations
- 21 Occupations in Natural Sciences, Engineering and Mathematics
- 23 Occupations in Social Sciences and Related Fields
- 25 Occupations in Religion
- 27 Teaching and Related Occupations
- 31 Occupations in Medicine and Health
- 33 Artistic, Literary, Performing Arts and Related Occupations
- 37 Occupations in Sport and Recreation
- 41 Clerical and Related Occupations
- 51 Sales Occupations
- 61 Service Occupations

- 71 Farming, Horticultural and Animal-Husbandry Occupations
- 73 Fishing, Trapping and Related Occupations
- 75 Forestry and Logging Occupations
- 77 Mining and Quarrying Including Oil and Gas Field Occupations

THIS
BOOK

- 81/82 Processing Occupations
- 83 Machining and Related Occupations
- 85 Product Fabricating, Assembling and Repairing Occupations
- 87 Construction Trades Occupations
- 91 Transport Equipment Operating Occupations
- 93 Other Material-Handling and Related Occupations
- 95 Other Crafts and Equipment Operating Occupations
- 99 Occupations Not Elsewhere Classified

MAJOR, MINOR AND UNIT GROUP TITLES

MAJOR GROUP 71 - FARMING, HORTICULTURAL AND ANIMAL-HUSBANDRY OCCUPATIONS

711 FARMERS

- 7111 General Farmers
- 7113 Animal Farmers
- 7115 Crop Farmers

713 FARM MANAGEMENT OCCUPATIONS

- 7131 Farm Management Occupations

718/719 OTHER FARMING, HORTICULTURAL AND ANIMAL-HUSBANDRY OCCUPATIONS

- 7180 Foremen/women, Other Farming, Horticultural and Animal-Husbandry Occupations
- 7181 General Workers, Farm
- 7183 Field Crop and Vegetable-Growing Workers
- 7185 Orchard, Vineyard and Related Tree and Shrub-Crop Workers
- 7187 Livestock Workers
- 7191 Dairy Workers, Farm
- 7193 Poultry and Hatchery Workers
- 7195 Nursery and Related Workers
- 7197 Farm-Machinery Operators and Custom Operators
- 7198 Occupations in Labouring and Other Elemental Work: Farming, Horticulture and Animal Husbandry
- 7199 Other Farming, Horticultural and Animal-Husbandry Occupations, n.e.c.

MAJOR GROUP 73 - FISHING, TRAPPING AND RELATED OCCUPATIONS

731 FISHING, TRAPPING AND RELATED OCCUPATIONS

- 7311 Captains and Other Officers, Fishing Vessels
- 7313 Net, Trap and Line Fishing Occupations
- 7315 Trapping and Related Occupations
- 7319 Other Fishing, Trapping and Related Occupations

MAJOR GROUP 75 - FORESTRY AND LOGGING OCCUPATIONS

751 FORESTRY AND LOGGING OCCUPATIONS

- 7510 Foremen/women, Forestry and Logging Occupations
- 7511 Forestry Conservation Occupations
- 7513 Timber Cutting and Related Occupations
- 7516 Log Inspecting, Grading, Scaling and Related Occupations
- 7517 Log Hoisting, Sorting, Moving and Related Occupations
- 7518 Occupations in Labouring and Other Elemental Work, Forestry and Logging
- 7519 Other Forestry and Logging Occupations

MAJOR GROUP 77 - MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCUPATIONS

771 MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCUPATIONS

- 7710 Foremen/women, Mining and Quarrying Including Oil and Gas Field Occupations
- 7711 Rotary Well-Drilling and Related Occupations
- 7713 Rock and Soil Drilling Occupations
- 7715 Blasting Occupations
- 7717 Mining and Quarrying: Cutting, Handling and Loading Occupations
- 7718 Occupations in Labouring and Other Elemental Work, Mining and Quarrying Including Oil and Gas Fields
- 7719 Other Mining and Quarrying Including Oil and Gas Field Occupations

MASTER TITLES AND DEFINITIONS

(Refer to TYPES OF OCCUPATIONAL TITLES in Introduction to the CCDO GUIDE for explanation of master titles and definitions and their applications)

01-060 DESIGN ENGINEER (prof. & tech., n.e.c.)

Applies established engineering principles to the design and development of equipment, structures, processes and systems, by performing any combination of the following duties:

Analyzes proposal, product or equipment specifications, and process requirements to conceive a practical design. Determines feasibility from the standpoint of costs, space, time limitations, company plans, availability of standard equipment and other technical and economic factors. Consults with research engineers and scientists, or customer representatives to resolve design problems related to product styling and production planning. Provides technical information concerning construction and manufacturing techniques, material properties, and advantages and limitations affecting plant, product and long-range planning. Compiles and analyzes operational data, and directs complex tests to establish standards for new designs or modifications to existing equipment, products or processes. Prepares related installation, operation and maintenance specifications and instructions. Supervises and coordinates the work of technologists and technicians who act in direct support of research activities.

01-070 ENGINEERING TECHNICIAN (prof. & tech., n.e.c.)

Carries out a limited number of technical functions in an engineering specialization, such as chemical, civil, electrical, industrial, mechanical, metallurgical, mining, petroleum, aeronautical or nuclear engineering, primarily in relation to installation, operation and maintenance, quality control and production planning activities, using a basic knowledge of specific engineering, scientific, mathematical and drafting design principles and techniques, by performing any combination of the following duties:

Interprets work assignment instructions, selects and adapts standard procedures, techniques and equipment and establishes work sequence. Prepares, marks, measures or weighs test materials or samples. Estimates time, quantities of material, and labour required for such activities as testing, installation, maintenance, manufacture or construction. Incorporates design details into drawings following specifications for machinery, tools, or processes. Constructs, installs, maintains, repairs, calibrates and modifies standard equipment or systems according to standards, tests or instructions. Adapts and constructs auxiliary devices for tests, and operates standard equipment to test materials, samples and products. Makes calculations and prepares charts, graphs and supporting data for reports.

01-080 ENGINEERING TECHNOLOGIST (prof. & tech., n.e.c.)

Carries out a variety of technological functions in an engineering specialization, such as chemical, civil, electrical, industrial, mechanical, metallurgical, mining, petroleum, aeronautical, or nuclear engineering, primarily in support of engineering research, development and design activities, using knowledge of engineering, scientific, mathematical and drafting design principles and practices, by performing any combination of the following duties:

Analyzes technical problems, co-ordinates the construction of working models, pilot plants and similar prototypes, and develops and interprets design specifications for complex equipment and processes to assist engineers and other technical workers in the research, design, and development of products, systems, processes and equipment. Represents engineers on work or test sites to ensure compliance with design specifications, study objectives and standards relating to production or quality control, and industrial or construction safety. Examines and evaluates assignments, defines problems, determines procedures to arrive at solutions, and schedules work. Obtains or prepares detailed estimates of time, quantities, labour and material costs required for work in such areas as product design, testing of construction, equipment installations, and manufacturing processes. Diagnoses complex equipment or process malfunctions, production or test problems; plans and carries out corrective action or directs other workers in rectifying problems. Conducts work studies and method analyses, and performs

statistical calculations necessary for establishing work standards. Interprets and evaluates, at a level below that of the engineer, experimental, test, and other data and prepares reports and recommendations based on evaluations. Oversees and co-ordinates activities of technicians, skilled craftsmen/women and other workers engaged in various aspects of technical assignments. Assists in the training of less experienced technical workers.

01-090 GENERAL MANAGER (prof. & tech., n.e.c.)

Plans, organizes, directs and controls the major functions of an industrial, commercial, governmental, or other establishment through departmental managers and other subordinate executives, and within powers delegated by a directorate, governing body, or official decree, by performing any combination of the following duties:

Establishes organization objectives, formulates and approves policies and programs and sets standards by using knowledge of organization's capacities; analyzing economic, social, technical, legal and other trends; consulting with subordinate managers and executives; and reviewing staff recommendations and reports. Authorizes establishment of major departments and key executive positions, and funds to implement departmental policies and programs. Selects or approves selection of departmental managers and senior staff, delegates authority and approves overall personnel program. Directs, motivates and develops skills of executive and managerial personnel to foster productivity, growth and high morale, exercising leadership ability and using knowledge of management science. Co-ordinates activities of departments or other functional units by utilizing staff conferences, schedule boards, flow charts and other devices, and by developing effective lines of communication. Provides for administration controls, such as reports, audits and inspections. Maintains awareness of developments affecting objectives and policies, and takes initiative in effecting remedial action or needed adjustments, in consultation with executives concerned. Assumes responsibility for products or services of establishment. Represents organization, or delegates representatives in negotiations, at conventions, seminars and other official occasions. Entertains officials, develops liaison with other organizations and frequently sits on charitable, educational or other civic committees, to promote good public relations.

General managers are designated according to the industry in which they work, and frequently, as senior officials, hold appointments such as President, Vice-President or Chairman/woman of the Board or other governing body.

01-140 LIFE SCIENCES TECHNICIAN (prof. & tech., n.e.c.)

Carries out a limited number of technical functions in a life sciences specialization, such as botany, zoology, forestry, horticulture, agriculture or medicine, primarily in relation to biological testing and analysis activities, using a basic knowledge of specific scientific and mathematical principles, and laboratory techniques, by performing any combination of the following duties:

Interprets work assignment instructions, selects and adapts standard procedures, techniques and equipment and establishes work sequence. Takes, prepares, marks, measures or weighs biological specimens. Sets up laboratory, medical and other scientific equipment for experiments, tests and analyses, and adjusts or aligns equipment as required. Conducts experiments, tests and analyses, and records and organizes observations and conclusions. Makes calculations and prepares charts, graphs and other supporting data for reports.

01-150 LIFE SCIENCES TECHNOLOGIST (prof. & tech., n.e.c.)

Carries out a variety of technological functions in a life sciences specialization, such as botany, zoology, forestry, horticulture, agriculture or medicine, primarily in support of biological research, testing and analyses activities, using knowledge of scientific and mathematical principles and laboratory practices, by performing any combination of the following duties:

Assists life scientists and other technical workers in design and development of research methods and equipment. Searches reference publications and makes recommendations concerning technical problems. Performs pre-test experiments and analyses, develops design specifications for, and constructs or oversees the construction of special test equipment. Obtains or prepares estimates of time, and costs of quantities of material and equipment for tests, analyses, experiments or other research activities; plans and schedules work. Sets up scientific equipment for experiments, tests and analyses, and calibrates precision equipment as required. Performs quality control tests to ensure reagents and equipment are functioning as specified. Conducts experiments, tests and analyses, requiring a high degree of skill and judgment, and involving a large number of operations with many possible sources of error. Modifies and adapts procedures and equipment as required. Interprets and evaluates test and other data at a level below that of the life scientist; prepares reports and recommendations based on evaluations, and frequently assists life scientists in preparing material for publications.

01-170 MANAGER (prof. & tech., n.e.c.)

Plans, organizes, directs and controls the activities of a department, division, program, regional office or other unit of an industrial, commercial, governmental or other establishment, through subordinates who are at a supervisory level or above and within policies laid down by senior management by performing any combination of the following duties:

Establishes procedures to implement policies and directives of senior management, and recommends changes in policies to achieve assigned objectives, based on detailed knowledge of the unit's performance capabilities. Prepares and submits financial estimates for approval. Determines organizational structures in unit, and defines subordinate managerial and supervisory functions. Selects or approves appointment of subordinate staff, and directs their training to ensure efficient usage of personnel and material. Co-ordinates activities within assigned areas and with other departments or units by conferring with other managers or subordinates and utilizing schedule boards, flow charts and similar devices. Reviews effectiveness of assigned operations, enforces regulations, prepares reports, and advises senior management of trends in own operations which may be significant for other units of the organization. Assumes responsibility for operations of unit. Assists staff with important and difficult administrative or technical problems. Negotiates with specialists, technical consultants and external organizations on matters such as business services and union contracts. Represents organization on boards or committees as a delegated specialist, or in a public relations capacity.

Managers are usually designated according to assigned responsibility in the department or other unit of the organization.

01-180 MANAGING SUPERVISOR (any ind.)

Plans, organizes, directs and controls the operations of an establishment engaged in retail or wholesale trade, or in providing services to the public, to business or other organizations, on own or owner's behalf or in partnership, and supervises and co-ordinates activities of subordinate workers, by performing any combination of the following duties:

Estimates consumer demands, and determines or recommends types and quantities of merchandise or services to be sold, and price and credit policies to be implemented. Defines operating procedures. Plans budget, prepares or supervises preparation of purchase orders for stock and supplies, and authorizes or obtains authorization for expenditures. Establishes layout of premises. Determines staff functions and numbers and hires or arranges for hiring of staff. Assigns duties, sets salaries, and initiates personnel action such as promotions and discharges. Supervises and trains workers, or oversees supervision and training. Co-ordinates activities of workers to ensure efficient operations. Counts and deposits money received, or supervises handling of money, takes or verifies inventories, and keeps accounts and other records. Ensures that safety, health and security regulations are followed. Promotes the sale of establishment goods or services, and approves advertising and display work. Receives and acts on customer complaints. Confers with workers or their representatives to resolve grievances and other employee problems.

When operating a small establishment, performs some or all of the duties of the workers. When operating an establishment on own behalf

or in partnership, is commonly known as a **WORKING PROPRIETOR**. See term title definition, 02-450 **WORKING PROPRIETOR**, for method of classification. Managing supervisors, including working proprietors are designated according to merchandise or services offered for sale, or type of establishment operated.

01-210 PHYSICAL SCIENCES TECHNICIAN (prof. & tech., n.e.c.)

Carries out a limited number of technical functions in a physical sciences specialization, such as physics, chemistry, geology, geophysics, meteorology or astronomy, normally in relation to operation and maintenance, and quality control activities, using a basic knowledge of specific scientific and mathematical principles and laboratory techniques, by performing any combination of the following duties:

Interprets work assignment instructions, selects and adapts standard procedures, techniques and equipment, and establishes work sequence. Prepares, marks, measures or weighs test materials or samples. Sets up laboratory and other scientific equipment for experiments, tests and analyses, and adjusts or aligns equipment as required. Conducts experiments, tests and analyses and records and organizes observations and conclusions. Makes calculations and prepares charts, graphs and other supporting data for reports.

01-220 PHYSICAL SCIENCES TECHNOLOGIST (prof. & tech., n.e.c.)

Carries out a variety of technological functions in a physical sciences specialization, such as physics, chemistry, geology, geophysics, meteorology, or astronomy, primarily in support of research activities, using knowledge of scientific and mathematical principles and laboratory practices, by performing any combination of the following duties:

Assists physical scientists and other technical workers in design and development of research methods and equipment, by searching reference publications, making recommendations concerning technical problems, performing pre-test experiments and analyses, and by developing design specifications for, and constructing or overseeing the construction of special test equipment. Obtains or prepares estimates of time and costs, of quantities of material and equipment for tests, analyses, experiments or other research activities. Plans and schedules work. Sets up scientific equipment for experiments, tests and analyses, and calibrates precision equipment as required. Conducts experiments, tests and analyses, requiring a high degree of skill and judgment, and involving a large number of operations with many possible sources of error. Modifies and adapts procedures and equipment as required. Interprets and evaluates experimental, test and other data at a level below that of the physical scientist; prepares reports and recommendations based on evaluations, and frequently assists physical scientists in preparing material for publications.

01-230 SALESPERSON (ret. trade; whole. trade)

Sells merchandise to individuals from sales floor and at customer's home or place of business, applying knowledge of characteristics, quality and merit of items sold, by performing any combination of the following duties:

Talks to customer on sales floor or elsewhere to ascertain his or her wants, and follows up initial contact, by phone or in person, to solicit business. Displays merchandise, shows descriptive material and demonstrates article, emphasizing saleable features. Advises customer on care and use of article. Estimates or quotes prices, credit terms, trade-in allowances and delivery date. Prepares sales slip or sales contract. Receives payment or obtains credit authorization. Prepares reports of business transactions and keeps expense accounts. Sets up displays of merchandise in window or on sales floor. Prepares inventory of stock, and requisitions merchandise from stockroom or warehouse.

Salespersons are usually designated according to product sold.

01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.)

Supervises and co-ordinates activities of workers engaged in one or more occupations, by performing any combination of the following duties:

Studies assignments, determines manpower requirements, and estimates materials and supplies needed for completion of work. Establishes

methods to meet work schedules. Requisitions materials and supplies. Hires and assigns duties to workers, recommends or initiates personnel actions, such as promotions, transfers, discharges, and disciplinary measures, and maintains personnel and attendance records. Trains or arranges for the training of workers and explains company policies. Sets up machines and equipment and interprets work orders, specifications or technical drawings. Initiates or suggests plans to motivate workers to achieve goals. Co-ordinates activities of own workers and confers with other supervisors, foremen/women and/or superiors to avoid conflicts with other units or departments. Ensures that quality of work meets standards, inspects materials received, and enforces safety regulations. Analyzes and resolves work problems. Prepares and submits production, progress or other reports. Recommends measures to improve work

methods, equipment performance, quality of product or service, and working conditions. Confers with workers or their representatives to resolve complaints and grievances.

When supervising workers engaged in one occupation, is usually required to be adept in activities under supervision. When supervising workers engaged in several occupations, is required to possess general knowledge of activities involved. Supervisors and foremen/women are designated according to type of work supervised, process involved, craft of workers supervised, product manufactured or industry in which work occurs. A working supervisor or foreman/woman, commonly known as a **GROUP LEADER**, or **LEAD HAND**, who primarily performs the same duties as the workers supervised, is identified by the same occupational title as the workers.

TERM TITLES AND DEFINITIONS

(Refer to TYPES OF OCCUPATIONAL TITLES in Introduction to the CCDO GUIDE for explanation of term titles and definitions and their applications)

02-010 APPRENTICE (any ind.)

A term used to describe a worker who is bound by contractual agreement to serve an employer for a specified period of time, with a view to learning a craft or trade in which the employer is obligated to instruct him or her:

In general, the contract sets out the minimum number of hours of training required to complete the apprenticeship and outlines wage increases throughout the program on the basis of a graduated minimum scale. An apprentice follows a program of on-the-job, and related classroom and shop training lasting about one to four years and leading to a prescribed level of competence in an occupation. Apprenticeship programs are usually under the guidance of an advisory committee representing management, labour and government. Entry age and educational levels, health standards and training requirements vary with the apprenticed occupation and frequently are specified by provincial legislation. An apprentice is usually between the ages of sixteen and twenty-five. In some provinces, an older worker with background experience in a trade may be accepted as a 'mature apprentice'. Credit may be given for previous related experience or training. Normally, the successful completion of eight to twelve years schooling is required before commencing apprenticeship. An examination on all phases of training usually terminates the program, and successful completion results in the receipt of a certificate of apprenticeship. Workers who complete an apprenticeship program may be required to obtain licences or pass certification examinations before being permitted to practise their trade.

Apprentices are classified in the same unit group as the occupations for which they are being trained.

02-040 ASSISTANT (any ind.)

A term used to describe a worker who directly assists another or other workers at the professional and managerial levels, by performing essentially DATA- and PEOPLE-related functions that are clearly subordinate to those of the worker assisted, but which frequently require formal training in the assistant specialization:

Excluded are the following who should be designated and classified as indicated: A worker who performs duties closely related to those of the worker assisted and who on occasion may assume the authority and responsibilities of the worker assisted should be assigned the same title and classification as the worker assisted. A worker who has been designated as an assistant by an establishment because his or her work fulfills an operational support function, but who does not directly assist other workers, should be assigned a title more indicative of the work performed and classified accordingly. A worker who directly assists a professional such as one engaged in a scientific, engineering, mathematical or drafting design field by performing essentially DATA- AND THINGS-related functions may be designated and classified as a TECHNICIAN or TECHNOLOGIST.

A worker who performs routine, primarily manual duties in direct support of a more competent processing, manufacturing, construction and primary industry worker may be designated and classified as a HELPER. See term title definition, 02-160 HELPER.

02-070 CHIEF ENGINEER (prof. & tech., n.e.c.)

A term used to describe an engineer who uses the principles and methods of management to supervise and co-ordinate the technical or administrative activities of other engineers, technologists, technicians and trades people:

The workers supervised are concerned with such activities as research, design, development, evaluation, manufacture and repair of machinery, components, tools and equipment; and with related methods, procedures and processes in governmental, industrial and business establishments.

Chief engineers are usually classified in the same unit group as the engineers they supervise.

02-090 CONSULTANT (prof. & tech., n.e.c.)

A term applied to a worker who utilizes expertise and knowledge of a specialized field of activity to evaluate and recommend improvements in the practice of that specialization in a commercial, industrial, governmental or other organization, by performing any combination of the following duties:

Analyzes objectives, policies, methods and procedures relating to specializations, such as product administration, labour relations, public relations and safety standards. Devises tests, prepares flow charts, conducts interviews and examines records and other data to determine degree to which objectives are being achieved. Prepares reports and recommendations for modification and changes in policies, methods and procedures to improve efficiency. Assists with implementation of recommendations by such means as revising procedures, and preparing and conducting retraining sessions.

Consultants are designated according to title of specialization, such as ENGINEERING CONSULTANT, PERSONNEL MANAGEMENT CONSULTANT, and EDUCATIONAL SPECIALIST. These occupations are classified in the unit group with the worker, in the same field of specialization, who performs functions of a non-consulting nature, or, when such a unit group does not exist, in Unit Group 1179 - OTHER OCCUPATIONS RELATED TO MANAGEMENT AND ADMINISTRATION.

02-130 ENGINEER (prof. & tech., n.e.c.)

A term used to describe a worker who plans, designs and develops equipments, machines, products, systems and processes, using scientific and engineering principles, to serve human needs and desires:

Engineers must possess qualifications acquired through formal training and work experience which normally lead to legal certification by appropriate licensing authorities. Engineers are classified according to the discipline in which the individual is most active, such as aeronautical, agricultural, electrical, electronic, chemical, civil, mechanical, metallurgical, mining, marine and structural engineering. Engineers primarily engaged in managerial, teaching or sales activities are classified in the appropriate Major Group according to work performed.

02-150 GRADER (any ind.)

A term used to describe a worker who classifies and sorts materials and products according to established quality-control standards:

Examines materials and products by sight, touch, taste or smell, or by the use of scales or gauges, and grades them according to such standards as weight, size, colour or general condition. Grades foodstuffs such as grains, fruits, vegetables, meat, eggs and cheese. Grades other products such as tobacco, lumber, diamonds, leather and fur.

Graders are usually designated according to the product graded, and are normally classified in unit groups for INSPECTING, TESTING, GRADING AND SAMPLING OCCUPATIONS.

02-160 HELPER (any ind.)

A term used to describe a worker who supports another worker of a higher level of expertise in an occupation, by performing a combination of more routine, essentially manual duties, such as the following:

Conveys and holds materials and tools for worker aided, and uses hand or power tools or appliances in a helping capacity. Transports materials, tools, and supplies to and from worksite, using wheelbarrows, hand trucks, hoists, powered equipment and similar devices. Prepares surfaces and mixes materials for the use of the worker aided, and cleans, mounts, places, or assembles parts or objects. Performs routine tasks related to installation, set-up, maintenance or dismantling of machines and equipment. Tends or feeds machines and equipment, offbears materials or parts and performs operating adjustments as directed. Takes samples for analysis, keeps work records, or performs other related tasks.

A worker who can perform his or her work independently of another worker is not a HELPER, and is designated and classified according to the work performed. HELPERS are classified in the appropriate unit group according to work performed.

02-170 INSPECTOR (any ind.)

A term used to describe a worker who critically examines any of a variety of goods, services or operations for conformity to established quality, health, safety, legal, business, ethical or other standards, by performing any combination of the following duties:
Examines raw materials for quality and manufactured items for defects and for conformance to specifications, visually and using sample models and instruments, such as scales, gauges, templates, calipers and micrometers. Verifies that established standards are maintained relative to such matters as food-growing, processing and marketing; product-packaging; storage and transportation methods; buildings and facilities; and business practices, operations and services. Affixes seals or tags to approved items, issues or revokes licences and permits or ascertains that licences and permits have been obtained and are displayed. Confers with officials, interprets regulations and codes, and assists establishments in altering methods and practices to meet established standards. Investigates complaints and violations, prepares reports of findings and action taken or recommended, files charges and testifies in court. Recommends changes in standards, administrative procedures, facilities, methods and practices.

Inspectors are normally identified according to product, item or service inspected. Typical titles are: 8256-112, PAPER INSPECTOR (pulp & paper); 8336-110, WELD INSPECTOR (mach., weld. & forg.). Inspectors in the fields of processing, machining, fabricating and assembling materials, goods or products are classified in unit groups for INSPECTING, TESTING, GRADING, AND SAMPLING OCCUPATIONS. Inspectors and Regulatory Officers concerned with enforcing and advising on governmental health, safety or other regulations are classified in Unit Group 1116, INSPECTORS AND REGULATORY OFFICERS, GOVERNMENT. Inspectors and Regulatory Officers concerned with enforcing and advising on adherence to non-governmental standards and regulations in such areas as quality of service and observance of company business policies and procedures, are classified in Unit Group 1176, INSPECTORS AND REGULATORY OFFICERS, NON-GOVERNMENT.

specifications, to provide service in the installation, operation and repair of equipment in customer's establishment, by performing any combination of the following or similar duties:

Consults with staff in manufacturer's engineering department to resolve problems of machine design, and to avoid construction and installation problems in customer's establishment. Studies drawings or blueprints to become familiar with equipment operation. Oversees installation of equipment in customer's establishment. Operates machine through trial runs to ensure that quality and rate of production meet specifications. Trains customer's personnel in operating, adjusting, maintaining and repairing equipment. Consults with customer about deviation of equipment operation from original specifications, and explains reasons for changes. Repairs or supervises repair of worn or defective equipment in customer's establishment.

Manufacturer's service representatives are classified in unit groups which reflect the nature of service provided and type of equipment serviced.

02-190 LABOURER/ELEMENTAL WORKER (any ind.)

A term used to describe a worker who performs one or more uncomplicated tasks, usually physical in nature, involving such functions as feeding-offbearing and handling materials and objects, which may require the use of simple tools or equipment:

In the performance of his or her duties may be required to speak to, signal or serve other persons and carry out simple data-related functions such as copying and comparing. Applies common sense understanding to carry out tasks in standardized situations with occasional or no variables in or from these situations. Normally, these tasks require only simple demonstration, instruction or explanation in preparation for average performance on the job, though in some instances training may last a few days.

Many occupations which are classified in unit groups entitled, 'OCCUPATIONS IN LABOURING AND OTHER ELEMENTAL WORK' are not designated by the title LABOURER, but by titles which are more descriptive of the work performed, such as 9318-142, PACKAGER, HAND (any ind.) and 8578-130, MOULD FILLER (plastic prod.; rubber). Workers designated as LABOURERS or ELEMENTAL WORKERS, who perform a combination of uncomplicated tasks, such as those of a LABOURER, GENERAL, may be required to carry out tasks involving a few concrete variables in standardized situations.

02-310 RESEARCH ENGINEER (prof. & tech., n.e.c.)

A term used to describe an engineer who, in co-operation with scientists and other engineers, engages in basic and applied research activities, directed toward the investigation, evaluation and application of engineering and scientific theories and principles to practical problems: Conducts studies in areas, such as pre-stressed concrete construction, high-pressure instrumentation, supersonic flight, operation of continuous chemical processes at high and low pressures and temperatures, radar, colour television and electronic computation and control. Consults with other engineers and scientists regarding the development and improvement of new or existing products, services or production processes. Follows the studies from inception, through the drafting phase, to the production of the prototype or model and the preparation of technical reports. Supervises and co-ordinates the work of technologists and technicians who act in direct support of his or her research activities.

Research engineers are classified in the appropriate engineering unit group according to work performed.

02-240 MANUFACTURER'S SERVICE REPRESENTATIVE (any ind.)

A term used to describe a worker who utilizes a knowledge of mechanical, hydraulic and electrical principles and the manufacturer's

02-330 SAMPLER (any ind.)

A term used to describe a worker who collects samples of raw or processed materials for laboratory analysis and quality-control purposes, performing duties such as the following:

Collects samples by dipping, scooping, pouring or cutting. Marks samples with identifying information and sends them to laboratory. Weighs, pulverizes, screens and/or blends materials from various collection points to provide representative samples.

Samplers are normally designated according to the material sampled, and are classified in unit groups for INSPECTING, TESTING, GRADING AND SAMPLING OCCUPATIONS.

02-350 SCIENTIST (prof. & tech., n.e.c.)

A term used to describe a worker who conducts investigations or enquiries to acquire a theoretical, abstract or practical knowledge of physical and natural phenomena:

States problems and frames questions which are capable of yielding significant facts, theories, laws and concepts, and tests hypotheses through observation, investigation or experimentation.

Scientists are classified according to the discipline in which the individual is most active, such as chemistry, physics, geology, meteorology, geography, metallurgy, agriculture, zoology, botany and pharmacology.

02-380 SQUAD MAN/WOMAN (any ind.)

A term used to describe a worker who is trained in all phases of manufacturing within a specific industry, through a company-oriented training program to identify and develop supervisory and executive talent in individuals:

Substitutes for absentees, as needed, to keep departments fully-manned in emergencies. Conducts assigned studies in areas of specialized training for production problem identification, analysis, documentation and preparation of reports. Investigates and studies alternate methods and procedures and, upon approval, institutes and conducts programs to modify existing production procedures. Participates as a member of a team of specialists to inaugurate production with new installations.

Squad men/women are normally designated by the industry in which they work, and are classified in the appropriate supervisor; foreman/woman or managerial unit group according to work performed.

02-410 TECHNICIAN (prof. & tech., n.e.c.)

A term used to describe a worker who performs a limited number of technical functions in a physical science, life science or engineering specialization, primarily in relation to installation, operation and maintenance, quality control, production planning or biological testing and analysis activities, using a basic knowledge of specific scientific, mathematical or engineering and drafting design principles and practices:

Interprets work-order assignments, selects and adapts standard procedures, techniques and equipment and establishes work sequence. Takes, prepares, marks, measures or weighs test materials, or samples. Sets up scientific equipment and conducts experiments, tests and analyses, or constructs, installs, maintains, repairs, calibrates or modifies industrial or other equipment. Makes calculations and prepares charts, graphs and other supporting data for reports.

Reference should be made to the following unit groups for classification possibilities of technologists and technicians: 2117, PHYSICAL SCIENCES TECHNOLOGISTS AND TECHNICIANS; 2135, LIFE SCIENCES TECHNOLOGISTS AND TECHNICIANS; 3156, MEDICAL LABORATORY TECHNOLOGISTS AND TECHNICIANS; 3155, RADIOLOGICAL TECHNOLOGISTS AND TECHNICIANS; 3157, DENTAL HYGIENISTS, ASSISTANTS AND TECHNICIANS; 2165, ARCHITECTURAL AND ENGINEERING TECHNOLOGISTS AND TECHNICIANS and 2353, TECHNICIANS IN LIBRARY, MUSEUM AND ARCHIVAL SCIENCES. Other technicians are classified in the same unit group as the worker assisted, or according to work performed. Workers who directly assist another or other workers at the professional and managerial levels are designated as ASSISTANTS provided that they perform essentially DATA- and PEOPLE-related functions. Assistants frequently require formal training in the occupational specialization and their functions are clearly subordinate to those of the worker assisted. Those workers who perform inspecting and testing functions at levels of complexity higher or lower than those specified for technologists and technicians may be classified in unit groups for scientific and engineering, or inspecting and testing occupations respectively.

02-420 TECHNOLOGIST (prof. & tech., n.e.c.)

A term used to describe a worker who performs a variety of technological functions in a physical science, life science or engineering specialization, primarily in support of research, development and design activities, using knowledge of scientific, mathematical or engineering and drafting design principles and practices:

Assists scientists, engineers and other technical workers in developing research methods and equipment, and designing and developing products, systems, processes and industrial equipment. Obtains or prepares estimates of time and material cost for research tests, analyses and experiments or for work projects or processes. Sets up scientific equipment and conducts experiments, tests and analyses. Diagnoses complex equipment or process malfunctions, and production or test problems, and carries out corrective action. Interprets and evaluates, at a level below that of the engineer or scientist, test and other data, and prepares reports and recommendations based on findings.

Reference should be made to the following unit groups for classification possibilities of technologists and technicians: 2117, PHYSICAL SCIENCES TECHNOLOGISTS AND TECHNICIANS; 2135, LIFE SCIENCES TECHNOLOGISTS AND TECHNICIANS; 3155, RADIOLOGICAL TECHNOLOGISTS AND TECHNICIANS; 3156, MEDICAL LABORATORY TECHNOLOGISTS AND TECHNICIANS and 2165, ARCHITECTURAL AND ENGINEERING TECHNOLOGISTS AND TECHNICIANS. Other technologists are classified in the same unit group as the worker assisted, or according to work performed. Workers who directly assist another or other workers at the professional and managerial levels are designated as ASSISTANTS provided that they perform essentially DATA- and PEOPLE-related functions. Assistants frequently require formal training in the occupational specialization and their functions are clearly subordinate to those of the worker assisted. Those workers who perform inspecting and testing functions at levels of complexity higher or lower than those specified for technologists and technicians may be classified in unit groups for scientific and engineering, or inspecting and testing occupations respectively.

02-430 TESTER (any ind.)

A term used to describe a worker who conducts routine tests in a laboratory or at a test bench on materials, components, machines or equipment to determine physical or chemical characteristics, or to verify conformity to specifications or functional standards, by performing any combination of the following duties:

Takes, prepares, marks, measures or weighs various samples, prior to conducting tests. Tests materials to determine physical or chemical characteristics. Tests electric or electronic components and equipment to verify conformity to specifications, using various electric or electronic testing equipment. Operates machines or equipment to test performance, and makes routine adjustments as required. Records test results. Marks approval on acceptable units, and returns defective units for reworking.

Testers are normally identified according to material or unit tested. Typical titles are: 8256-118, PULP TESTER (pulp & paper); 8336-138, SPRING TESTER (mach., weld. & forg.; metal fab., n.e.c.). Testers in the fields of processing, machining, fabricating and assembling materials, goods or products are normally classified in unit groups for INSPECTING, TESTING, GRADING, AND SAMPLING OCCUPATIONS. Those workers who perform a number of technical functions including testing at levels of complexity higher than that specified for testers may be classified in unit groups for scientific and engineering, or technologist and technician occupations.

02-450 WORKING PROPRIETOR (any ind.)

A term used to describe a worker who operates an establishment, on own behalf or in partnership:

Performs duties as described under the master titles, 01-090 GENERAL MANAGER (prof. & tech., n.e.c.); 01-170 MANAGER (prof. & tech., n.e.c.) or 01-180 MANAGING SUPERVISOR (any ind.), depending upon size and complexity of organization operated. When operating a small establishment, performs some or all of the duties of the workers.

Working proprietors are normally designated according to merchandise or services offered for sale, type of establishment or business operated, or professional, technical, craft or service function exercised. Working proprietors in sales and services who perform duties as described under the master title, 01-180 MANAGING SUPERVISOR (any ind.) are

classified in the supervisor unit groups in Major Group 51, Sales Occupations and 61, Service Occupations, respectively. Working proprietors in sales and services who perform duties as described under the master titles, 01-090 GENERAL MANAGER (prof. & tech., n.e.c.) and 01-170 MANAGER (prof. & tech., n.e.c.) are classified in Major

Group 11, MANAGERIAL, ADMINISTRATIVE AND RELATED OCCUPATIONS. Working proprietors found outside of Major Group 51, 61 and 11, are classified in the appropriate supervisory unit group of an appropriate minor group, or in the workers' unit group, if a supervisory unit group does not exist.

FARMING, HORTICULTURAL AND ANIMAL-HUSBANDRY OCCUPATIONS

This major group includes occupations concerned with growing and harvesting crops and plants; raising and breeding animals, livestock and poultry; landscaping and maintaining parks, gardens and grounds; and providing agricultural services to farmers. These occupations are classified in the following minor groups:

- 711 Farmers
- 713 Farm Management Occupations
- 718/719 Other Farming, Horticultural and Animal-Husbandry Occupations

711 – FARMERS

This minor group includes occupations concerned with operating general farms on an ownership, rental or other contractual basis to produce a variety of agricultural, horticultural and animal-husbandry products; or operating specialized farms to produce a particular product. Farmers frequently perform farm activities as described in Minor Group 718/719 – OTHER FARMING, HORTICULTURAL AND ANIMAL-HUSBANDRY OCCUPATIONS. Occupations concerned with the breeding and raising of fish (fish farming) or shellfish for commercial use are classified in Unit Group 7319, OTHER FISHING, TRAPPING AND RELATED OCCUPATIONS. FARMERS are classified in the following unit groups:

- 7111 General Farmers
- 7113 Animal Farmers
- 7115 Crop Farmers

7111-GENERAL FARMERS

This unit group includes occupations concerned with operating, on an ownership, rental, or other contractual basis, farms which have three or more revenue-producing enterprises. Activities include: planning farm operations; hiring, training and supervising workers; purchasing equipment and supplies; raising crops; breeding and raising farm animals and poultry; marketing related products; preparing cost, production and other records; and participating in daily work of farm.

7111-110 FARMER, GENERAL (agric.)

Operates farm involved in three or more revenue-producing activities; such as growing grain, growing fruit and raising livestock. Determines kinds and amounts of crops to be grown and livestock to be raised, according to market conditions. Purchases seed, farm machinery, livestock, feed and other supplies. Hires, directs, supervises and trains farm workers. Prepares land, plants, cultivates and harvests crops, breeds and raises livestock, maintains farm buildings, machinery and equipment, and performs other farming operations. Markets or negotiates sale of products. Records production, sales, receipts, expenditures and other data.

	APT.	INT.	TEMP.
G V N S P Q K F M E C			
3 3 3 3 3 4 3 4 3 3 4		1 0 7	1 4 9 0

7113-ANIMAL FARMERS

This unit group includes occupations concerned with operating, on an ownership, rental or other contractual basis, farms which have only one or two specialties, such as raising animals, bees or poultry. Activities include: planning farm operations; hiring, training and supervising workers; purchasing equipment and supplies; breeding and raising animals or poultry; marketing animals and their related products; preparing cost, production and other records; and participating in daily work of farm.

7113-110 APIARIST (agric.)

Operates an apiary for production and sale of honey, and directs, supervises and performs activities of workers. Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Directs or assists in erecting beehives. Purchases bees, supplies and equipment. Operates pressurized hand sprayer to treat beehives with disinfectant solution. Operates vehicle to transport beehives and honeycombs filled with bees to fields. Inserts honeycombs into

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hives. Inspects bees for disease and honeycombs for honey content, using smokepot to calm bees to allow for inspection. Mixes drugs, and operates pressurized hand sprayer to spray bee colonies to prevent disease. Forces bees from hives, using chemicals, escape board or forced-air blower, to allow for removal of honeycombs. Removes honey from honeycombs, using centrifugal extractor. Turns spigot on extractor to fill containers with honey. Negotiates sale of honey.

GED: 4 SVP: 7 PA: M 3 4 EC: B DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 3 4 3 4 3 4 4	1 0 7	1 4 9 0

(agric.). Feeds and waters birds by hand or using mechanical equipment. Inspects birds to detect disease, and places vaccines in drinking water or injects birds with vaccines. Cleans poultry houses and sprays them with disinfectant. Crates poultry, and ships to processing plants. Prepares performance records for research purposes and to monitor effectiveness of feeding programs and quality of breed stock. Raises and sells poultry for breeding.

GED: 4 SVP: 7 PA: M 3 4 EC: B DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 4 4	1 0 7	1 4 0 9

7113-114 BREEDER, HORSE (agric.)

Directs, supervises and performs a variety of farming operations to breed and raise saddle, harness-racing or draft horses, and to collect urine from pregnant mares:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Breeds mares to selected stallions. Feeds, waters and grooms horses. Treats minor injuries and illnesses and assists mares in foaling. Buys, sells and trades horses. Breaks, trains and exercises horses, drives horses in racing competitions, shows horses at fairs and horse shows, and performs other related duties. Fits pregnant mares with urine-collector device and attaches hose to main collector pipe to collect urine for sale to pharmaceutical-manufacturing establishments.

GED: 4 SVP: 7 PA: M 2 3 4 EC: B DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 3 4 3 4 3 3 4	7 1 0	4 1 0 9

7113-126 FARMER, BEEF CATTLE (agric.)

Directs, supervises and performs a variety of farming or ranching operations to breed and raise beef cattle:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Builds fences around pasture land and constructs enclosures to retain cattle. Operates farm machinery to plant, cultivate and harvest crops. Feeds cattle during winter and when grazing land is inadequate. Breeds cows by artificial insemination or with selected bulls. Slits calves' ears or brands or tattoos cattle to indicate ownership. Castrates young bulls and dehorns calves. Injects calves with serum to immunize them against disease. Trains and prepares livestock designated for showing. Markets livestock or negotiates their sale with buyers.

GED: 4 SVP: 7 PA: M 3 4 8 EC: B DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 3 4 3 4 3 3 4	0 1 7	4 1 0 9

7113-118 FARMER, POULTRY, EGG PRODUCTION (agric.)

Directs, supervises and performs a variety of farming operations to raise poultry for egg production:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Feeds and waters chickens. Collects eggs by hand or operates mechanical equipment to collect eggs. Packs eggs in cases or cartons for shipment or storage. Inspects chickens to detect disease, and places vaccines in drinking water or injects chickens with vaccines. Culls non-productive chickens. Cleans pens, coops and nests. Sprays chicken houses with disinfectant. Prepares performance records for research purposes and to monitor effectiveness of feeding programs and quality of breed stock. Markets eggs.

GED: 4 SVP: 7 PA: M 3 4 EC: B DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 4 4	1 0 7	1 4 0 9

7113-130 FARMER, DAIRY (agric.)

Directs, supervises and performs a variety of farming operations to breed and raise dairy cattle for milk production and for sale as breeding stock:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Plans breeding, feeding and milking schedules. Milks cows by hand or using milking machine. Feeds and waters cattle by hand or using mechanical equipment. Treats minor illnesses and injuries. Operates farm machinery to plant, cultivate and harvest crops used for feed. Cleans barns by hand or using mechanical equipment. Sterilizes milking machines and equipment to maintain product quality and health standards. Raises and sells cattle for breeding. Markets milk.

GED: 4 SVP: 7 PA: H 3 4 8 EC: B DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 3 4 3 4 3 3 4	1 0 7	1 4 0 9

7113-122 FARMER, POULTRY, MEAT PRODUCTION (agric.)

Directs, supervises and performs a variety of farming operations to raise chickens, turkeys or other poultry for meat production:

Performs duties similar to those of 7111-110 FARMER, GENERAL

7113-134 FARMER, HOG (agric.)

Directs, supervises and performs a variety of farming operations to breed and raise hogs for meat production and for sale as breeding stock:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Breeds sows with selected boars. Determines feed formula

according to age and weight of hogs. Feeds hogs by hand or using automatic feed dispensers. Injects hogs with serum to prevent disease. Cleans hog pens. Operates farm machinery to plant, cultivate and harvest crops used for feed. Sells hogs for slaughter and as breeding stock.

GED: 4 SVP: 7 PA: H 3 4 8 EC: B DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 3 4	1 0 7	1 4 0 9

7113-138 FARMER, SHEEP (agric.)

Directs, supervises and performs a variety of farming and ranching operations to breed and raise sheep for production of wool, meat and breeding stock:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Assists ewes during lambing and cares for newborn lambs. Transfers lambs outdoors when weather permits. Feeds sheep to supplement diet for rapid growth. Herds sheep, to and from grazing areas. Docks, shears and clips sheep. Grooms and exhibits show animals. Sells sheep for slaughter and as breeding stock, and markets wool.

GED: 4 SVP: 7 PA: M 3 4 EC: B DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 4 4	1 0 7	1 4 0 9

7113-142 FEEDLOT FINISHER (agric.)

Directs, supervises and performs a variety of feedlot operations to finish (fatten) beef cattle for market:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Buys young unfinished cattle. Plans feeding schedule according to age, size or condition of cattle. Operates farm equipment to plant, cultivate and harvest crops used for feed. Operates milling or grinding machine to grind feed, or arranges for mixing and milling of feed. Feeds and waters cattle by hand or using mechanical equipment. Immunizes cattle against disease and sprays cattle with insecticides. Operates front-end loader and spreader to clean feedlot area and to fertilize fields with waste materials. Sells cattle to packers or buyers.

GED: 4 SVP: 6 PA: H 3 4 8 EC: B DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 3 4	0 1	1 4 0

7113-146 FARMER, FUR (agric.)

Directs, supervises and performs a variety of farming operations to breed and raise fur-bearing animals such as chinchilla, fox or mink:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Inspects animals to detect illness. Inoculates animals to prevent disease. Cleans and disinfects pens and enclosures. Purchases feed and operates grinder to grind feed and additives. Loads truck with feed and transports and dumps feed at feeding stations, or loads feed onto conveyor system which automatically delivers feed to feeding stations. Supplies animals with fresh water, and adds vitamins

when necessary. Kills and skins animals, and matches pelts according to shade and quality. Places pelts in refrigerated storage for shipment, or ships pelts to buyer.

GED: 4 SVP: 6 PA: M 3 4 EC: B DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 3 4 3 3 3 4 3	0 1 7	4 1 9 0

7113-147 BREEDER, GOAT (agric.)

Directs, supervises and performs a variety of farming operations to breed and raise goats for sale of meat and for breeding stock:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Builds and maintains shelters and fences to enclose goats. Plans breeding schedule to produce offspring for spring market. Feeds and waters goats. Cleans barns and stalls. Milks goats by hand or using milking machine. Inoculates goats to prevent disease, and deworms as necessary. Burns off horns of young goats, using electric dehorning machine. Clamps metal tag to ear of goat to identify goat as a registered pure-bred. Negotiates sale of live goats for breeding and for slaughter.

GED: 3 SVP: 6 PA: M 3 4 EC: B DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 5 5	1 0	4 9 0

7113-150 BREEDER, DOG (agric.)

Directs, supervises and performs a variety of operations to breed, raise and sell pedigree dogs:

Breeds bitches to selected male dogs. Records breeding and whelping dates. Purchases feed, insecticides and other supplies. Feeds, waters and exercises dogs. Washes, clips and grooms dogs. Bathes, sprays and powders dogs to control insect pests. Inspects and treats dogs for disease and obtains veterinary services as necessary. Inoculates dogs against disease or arranges for inoculation by veterinarian. Trains dogs for shows, hunting, police work and other purposes. Exhibits dogs in shows. Buys dogs for breeding purposes. Sells dogs for breeding stock, police work or as pets.

GED: 3 SVP: 6 PA: L 3 4 EC: B DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 3 4 3 4 3 5 4	1 0	4 9

7113-154 BREEDER, CAT (agric.)

Directs, supervises and performs a variety of operations to breed, raise and sell cats:

Breeds cats selectively to produce offspring with desired characteristics. Purchases feed, insecticides and other supplies. Inspects cats to detect illness. Feeds and waters cats and adds vitamins to feed. Cleans and disinfects enclosures. Cleans and grooms cats and clips claws, and trims fur of show cats, using hand or electric clippers. Inoculates cats against disease or arranges for inoculation by veterinarian. Buys cats for breeding purposes. Sells cats for breeding stock or as pets.

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GED: 3 SVP: 6 PA: L 3 4 EC: I DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>3</u> <u>4</u> <u>3</u> <u>4</u> <u>3</u> <u>5</u> <u>4</u>	.1. 0	4 9

7113-156 BREEDER, PHEASANT (agric.)

Directs, supervises and performs a variety of farming operations to breed and raise pheasants for meat production, for sale as breeding stock and to stock game preserves:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Builds and maintains enclosures to house pheasants. Confines breeding stock indoors during laying period. Monitors incubators and brooders. Feeds and waters pheasants. Debeaks chicks to prevent cannibalism. Kills, dresses and freezes pheasants. Boxes frozen pheasants for marketing. Accepts reservations from hunters for pheasant hunting in game preserve. Crates live pheasants, transports them to game preserve, and releases them for hunting parties. Buys and sells breeding stock. Sells pheasants for meat production.

GED: 3 SVP: 6 PA: M 3 4 EC: B DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>3</u> <u>4</u> <u>3</u> <u>5</u> <u>4</u>	1 0 7	4 9 0 1

7113-158 BREEDER, RABBIT (agric.)

Directs, supervises and performs a variety of farming operations to breed and raise rabbits for sale of meat and for breeding stock:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Breeds rabbits selectively to produce stock with desired characteristics. Maintains records of individual rabbits to select breeding stock. Culls animals that do not meet required standards. Feeds and waters rabbits. Builds and repairs pens and enclosures. Cleans and disinfects pens and enclosures. Selects, kills and dresses rabbits, and arranges for sale of meat. Sells rabbits for breeding stock and as research subjects or pets.

GED: 3 SVP: 5 PA: L 3 4 EC: B DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>3</u> <u>4</u> <u>3</u> <u>5</u> <u>4</u>	7 1 0	4 1 9

7113-199 ANIMAL FARMERS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with operating, on an ownership, rental or other contractual basis, farms which have only one or two specialties, such as raising animals, bees or poultry, and related occupations not presently classified in Unit Group 7113.

7115-CROP FARMERS

This unit group includes occupations concerned with operating, on an ownership, rental or other contractual basis, farms which have one or two specialties, such as growing cereal, fruit, vegetable and other cash crops, and horticultural

plants. Activities include: planning farm work; hiring, training and supervising workers; purchasing equipment and supplies; planting and harvesting crops; marketing crops; preparing cost, production and other records; and participating in daily work of farm.

7115-110 FARMER, FRUIT (agric.)

Directs, supervises and performs farming operations to grow fruit: Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Purchases and plants nursery stock. Operates machines and uses hand tools to cultivate, plant and fertilize fruit crop. Grafts desired varieties to root stock. Prunes trees and bushes to increase yield. Plants compatible ground crops between rows of trees to conserve moisture and to improve soil. Irrigates soil and maintains irrigation system. Operates mechanical equipment or hand sprayer to spray trees and bushes with pesticides. Picks, grades and packs fruit. Arranges for sale of produce.

GED: 4 SVP: 7 PA: H 2 3 4 8 EC: O DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>3</u> <u>4</u> <u>3</u> <u>4</u> <u>4</u>	1 0 7	4 9 0 1

7115-114 FARMER, TOBACCO (agric.)

Directs, supervises and performs farming operations to grow tobacco: Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Plants tobacco seeds in greenhouses. Cultivates tobacco seedlings. Transplants seedlings in fields, by hand or using tractor-drawn planter. Breaks tops off tobacco plants and sprays or sponges oil on top of plant to retard sucker growth. Primes (picks) tobacco leaves. Ties or machine-stitches leaves to slats, and hangs slats of leaves in kiln. Operates electric, oil or gas-fired unit to heat kiln. Regulates speed of fan to control movement of heated air through tobacco leaves. Observes moisture content and colour of leaves, and adjusts temperature and draft controls to regulate drying and yellowing of leaves until curing is completed. Turns off heating unit and ventilates kiln to render leaves pliable for baling. Grades tobacco. Bales tobacco according to grade. Markets tobacco.

GED: 4 SVP: 8 PA: M 3 4 8 EC: O DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>3</u> <u>4</u> <u>3</u> <u>3</u> <u>4</u>	1 0 7	4 9 0 1

7115-118 GROWER, MUSHROOM (agric.)

Operates mushroom houses, and directs, supervises and performs activities of workers engaged in growing mushrooms: Erects and maintains mushroom houses. Purchases mature mushroom spawn and equipment and supplies. Operates machines which mix and ferment compost to produce suitable medium for growing mushrooms. Operates hand sprayer to spray and dust mushroom houses with insecticide and chemicals before and during growing cycle. Dumps compost onto conveyor belt for transport to trays and benches in mushroom houses. Operates steam-injection system to sterilize compost. Operates mechanical equipment or uses hand tools to distribute and mix mushroom spawn throughout compost. Waters mushroom

beds. Harvests and grades mushrooms, and packs mushrooms in containers. Markets mushrooms. Operates conveyor belt to remove compost from mushroom houses after harvest. Sells spent compost for use as fertilizer. Operates mechanical equipment to spray mushroom houses with steam and chemicals to clean and disinfect houses prior to next crop.

GED: 4 SVP: 7 PA: L 4 EC: I 7 DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 4 4	1 0 7	4 9 0 1

7115-122 FARMER, GRAIN/OILSEED (agric.)

Directs, supervises and performs farming operations to grow grain and oilseed crops:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Selects and buys seed. Applies fungicide to seed to increase resistance to disease, or buys treated seed. Operates farm machinery to cultivate, plant and fertilize crops. Operates farm machinery to harvest crops, or contracts with custom harvester. Transports harvest to storage or market. Sells crops.

GED: 4 SVP: 7 PA: M 4 8 EC: O DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 3 4	1 0 7	4 9 0 1

7115-126 FARMER, NURSERY (agric.)

Operates nursery to grow trees, shrubs and ornamental plants, and directs, supervises and performs activities of nursery workers:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Determines types and numbers of trees, shrubs and plants to be grown. Mixes soil with nutrients to prepare soil for planting. Plants bulbs and shoots in pots, and plants flower seeds in flats. Places pots and flats on greenhouse shelves, and regulates temperature, light and humidity of greenhouse. Operates farm machinery to cultivate and fertilize fields and plots. Plants bulbs and shrub and tree seeds and seedlings. Operates mechanical equipment or handsprayer to spray trees, shrubs, flowers and plants to combat insects and to prevent disease. Transplants marketable trees and shrubs in retail area, or wraps soil-covered roots with burlap and plastic sheeting in preparation for sale or shipping. Markets flats of flowers, and potted plants, shrubs and trees. Prepares displays or employs advertising media to promote sales. Provides landscaping and information services to customers. Operates retail store to market produce and gardening supplies.

GED: 4 SVP: 7 PA: H 3 4 8 EC: B DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 4 4	1 0 7	4 9 0 1

7115-130 FARMER, POTATO (agric.)

Directs, supervises and performs farming operations to grow potatoes: Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Operates farm machinery to cultivate and fertilize soil. Treats seed potatoes with chemical solution or dust to prevent disease. Fills hopper of tractor-drawn planter with seed potatoes, fertilizer and insecticide. Operates tractor-drawn planter to plant and fertilize potatoes, and to add insecticide to soil around potatoes. Irrigates soil and maintains irrigation system. Operates tractor-drawn sprayer to spray potato plants with chemical solution to kill potato tops and to condition potato skins. Operates potato harvester to dig potatoes and to load them into wagon. Operates machines to grade and bag potatoes. Constructs and maintains cold-storage buildings to store potatoes until marketed. Monitors temperature of cold-storage buildings.

GED: 4 SVP: 7 PA: M 4 8 EC: O DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 3 4	1 0 7	4 9 0 1

7115-134 FARMER, SOD (agric.)

Directs, supervises and performs farming operations to grow sod: Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Arranges for soil tests to determine types and amount of fertilizer required. Operates tractor-drawn farm machinery to cultivate, fertilize, plant and pack soil. Operates sprinkler system to irrigate sod. Operates tractor-drawn mower to mow grass. Operates sod cutter to cut and roll sod, and to place sod on pallets. Operates forklift to load pallets onto truck. Delivers sod, and instructs customers in laying of sod and care of lawn.

GED: 4 SVP: 7 PA: M 4 8 EC: O DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 3 4	1 0 9	4 9 0 1

7115-138 FARMER, VEGETABLE (agric.)

Operates farm or greenhouse to grow vegetables, and directs, supervises and performs activities of workers: Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Operates farm machinery to cultivate and fertilize soil. Mixes greenhouse soil with nutrients to prepare soil for planting. Plants seeds and seedlings in greenhouse or fields, using farm machinery and garden tools. Regulates temperature, light and humidity of greenhouse. Irrigates soil and maintains irrigation system. Thins and weeds crops by hand or using farm machinery. Operates mechanical equipment or handsprayer to spray and dust crops to combat insects and to prevent disease. Picks, cuts or pulls vegetables by hand or using harvesting machinery. Trims, washes, grades and packs vegetables, by hand or using mechanical equipment. Ships and markets vegetables.

GED: 4 SVP: 7 PA: H 3 4 8 EC: B DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 3 4 4 3 4 3 3 4	1 0 7	4 9 0 1

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7115-142 GROWER, FLOWER (agric.)

Operates farm or greenhouse to grow flowers and shrubs, and directs, supervises and performs activities of workers: Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Operates farm machinery or uses hand tools to cultivate, fertilize and plant soil. Regulates temperature, light and humidity of greenhouse. Buds or grafts scion or seedling stock. Operates mechanical equipment or handsprayer to spray and dust plants and shrubs with chemicals to control weeds, insects and diseases. Picks or cuts flowers, and places them in containers of water to maintain freshness. Digs shrubs, and wraps soil-covered roots with burlap and plastic sheeting. Markets flowers and shrubs. Provides landscaping information to customers.

GED: 4 SVP: 7 PA: H 3 4 8 EC: B 6 7 DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 4 4	1 0 7	4 9 0 1

7115-146 GROWER, HOP (agric.)

Directs, supervises and performs farming operations to grow hops: Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Operates farm machinery to cultivate and fertilize soil. Plants sets (cuttings from underground stems of mature plants), using hand tools. Constructs wire trellises on poles, and trains vines on strings leading from ground to overhead trellis. Operates handsprayer to prune vines with chemicals. Operates mechanical sprayer to control insects, fungi and plant diseases. Operates sprinkler system to irrigate crop. Harvests hops and arranges for their sale.

GED: 4 SVP: 7 PA: M 3 4 8 EC: O 6 7 DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 3 4	1 0 7	4 9 0 1

7115-150 GROWER, SEED (agric.)

Directs, supervises and performs farming operations to grow seeds: Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Selects and purchases seed stock. Operates farm machinery to cultivate and fertilize seed beds. Operates tractor-drawn or manual seeder to plant seeds. Operates mechanical equipment to till seed beds and to spray or dust plants with chemical solutions to control weeds and to prevent disease. Operates combine or uses hand tools to harvest seeds. Packs and delivers seeds to commercial houses.

GED: 4 SVP: 7 PA: M 3 4 8 EC: O 6 7 DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 4 4	1 0 7	4 9 0 1

7115-154 GROWER, GINSENG (agric.)

Directs, supervises and performs farming operations to grow ginseng: Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Selects choice plants each fall for seed harvest. Plucks seed pods from plants. Threshes pods and puts them through flotation

plant to separate seeds from husk. Buries seeds in cool, moist medium of sand, loam or sawdust to germinate seeds. Operates farm machinery to cultivate and fertilize soil. Plants germinated seeds or seedlings by hand or using tractor-drawn seeder. Erects roof shades over plants to provide shade. Mulches planted areas to insulate plants and seeds throughout the winter and to provide fertilizer in the spring. Sprays plants to prevent blight. Digs up mature roots with shovel or fork. Places roots in ventilated, heated room to dry until cured. Sorts, packs and stores roots. Ships roots to market.

GED: 4 SVP: 7 PA: M 3 4 8 EC: B 6 7 DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 4 4	1 0 9	4 9 0 1

7115-158 FARMER, SUGAR-BEET (agric.)

Directs, supervises and performs farming operations to grow sugar-beets:

Performs duties similar to those of 7111-110 FARMER, GENERAL (agric.). Operates farm machinery to cultivate and fertilize soil. Purchases insecticide-treated seeds. Fills hopper of tractor-drawn planter with seeds and fertilizer, and operates planter to plant and fertilize seeds. Irrigates soil and maintains irrigation system. Operates tractor-drawn sprayer to spray plants with herbicide. Thins sugar-beets to promote growth. Operates tractor-drawn machine to chop off leaves and tops of sugar-beets. Operates tractor-drawn harvester to dig sugar-beets and to load them into truck. Drives truck to processing plant.

GED: 4 SVP: 7 PA: M 3 4 8 EC: O 6 7 DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 4 4 4 3 4 3 3 4	1 0 7	4 9 0 1

7115-160 MAPLE-SYRUP PRODUCER (agric.)

Directs, supervises and performs a variety of activities to produce maple syrup from sap of sugar-maple trees:

Purchases equipment and supplies. Judges weather conditions to determine when trees are ready for tapping. Selects trees to be tapped, and bores holes in trees, using hand or power drill. Hammers spouts into trees, and hangs pails on spouts to collect sap. Empties pails of sap into collector tank mounted on wagon or sled, and replaces pail on spout. Drives tractor or horses to convey sap to sugar-house. Positions plastic pipe system used in vacuum method of sap collection throughout trees, and attaches piping to spouts on trees and to storage tank in sugar-house. Regulates pump or gravity system to transfer sap through pipes from trees to storage tank in sugar-house. Stocks sugar-house with wood supply for stove, or purchases other fuel. Cleans and assembles evaporator pans on stove, and connects hose from sap-storage tank to evaporator pans. Opens storage-tank valve to transfer sap through compartments of evaporator pans on stove. Adjusts stove controls to regulate heat. Opens valve to transfer syrup to finishing pans when sufficient evaporation has occurred. Observes colour of syrup and tests syrup with special thermometer to ensure syrup meets prescribed standards. Opens valve at end of finishing pan to drain syrup through filter into containers. Fills, caps and labels containers. Negotiates price and marketing of syrup. Prepares displays and advertises through media to promote sale of syrup on premises and in wholesale or retail outlets. Disassembles, cleans and stores equipment

at end of season. Records data on production, sales, receipts and expenditures.

GED: 4 SVP: 7 PA: M 3 4 EC: B 3 6 7 DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> 3 3 4 4 4 <u>3</u> 4 <u>3</u> 4 4	1 0 7	4 9 0 1

7115-162 GROWER, BEAN-SPROUT(agric.)

Directs, supervises and performs activities of workers engaged in growing bean-sprouts:

Purchases beans, equipment and supplies. Hires workers. Soaks beans overnight and transfers them to large crocks. Covers beans with layers of bamboo matting, and adds warm water regularly to soak beans and matting. Covers crocks with wooden tops. Transfers bean-sprouts to

sink and sprays them with cold water to remove skins. Scoops bean-sprouts from sink and shakes them to remove excess water. Places bean-sprouts in wicker container, and stores in cool storage area. Markets bean-sprouts or negotiates their sale. Prepares records of production, sales, receipts, expenditures and other data.

GED: 3 SVP: 3 PA: L 3 4 EC: I 4 DPT: 1 3 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 4 4 4 4 <u>3</u> 4 4	1 3	4 9 0

7115-199 CROP FARMERS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with operating, on an ownership, rental or other contractual basis, farms which have only one or two specialties, such as growing cereal, fruit, vegetable and other cash crops, and horticultural plants, and related occupations not presently classified in Unit Group 7115.

713 – FARM MANAGEMENT OCCUPATIONS

This minor group includes occupations concerned with managing farms and farm holdings, or a landscaping business, on behalf of a private, collective or governmental owner. Farm managers occasionally perform farm activities as described in Minor Group 718/719 – OTHER FARMING, HORTICULTURAL AND ANIMAL-HUSBANDRY OCCUPATIONS. FARM MANAGEMENT OCCUPATIONS are classified in the following unit group:

7131 Farm Management Occupations

7131-FARM MANAGEMENT OCCUPATIONS

This unit group includes occupations concerned with planning, organizing, supervising and controlling the operation of farms, farm holdings, or a landscaping business, on behalf of a private, collective, or governmental owner. Activities include: conferring with owners on the planning and sequence of farming or landscaping operations; hiring, training and supervising workers; ordering equipment and supplies; raising one or a combination of crops, horticultural plants, poultry, or livestock; preparing produce for marketing; and preparing and presenting cost, production and other records.

GED: 4 SVP: 8 PA: L 5 EC: B DPT: 1 1 8

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>2</u> <u>3</u> <u>3</u> 4 4 4 4 4 4 4 4	2 7 6 5	1 4 5

7131-114 MANAGER, HATCHERY (agric.)

Manages poultry hatchery:

Arranges for supply of hatching eggs from within establishment or from other poultry establishments. Schedules hatching dates based on orders on hand and from requirements for chicks within own establishment. Plans advertising and sales programs. Discusses and formulates plans with subordinates and directs and co-ordinates their activities. Arranges purchase of supplies such as incubators, feed and medicines. Advises customers on feeding, sanitary measures, and other information pertinent to raising chicks. Confers with personnel manager on staff requirements. Assumes responsibility for personnel, purchasing and other functions, if required. Manages custom hatchery to hatch eggs for other flock owners.

GED: 4 SVP: 7 PA: L 5 EC: I DPT: 1 1 8

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>2</u> <u>3</u> <u>3</u> 4 4 4 4 4 4 5 4	2 5 6 7	4 1 5

7131-110 MANAGER, FARM (agric.)

Plans, organizes and controls the operation of a farm or farm-holdings on behalf of private, collective or governmental owner:

Confers with employer to plan sequence of farming activities. Analyzes market conditions to determine acreage allocations and crops to be grown. Orders supplies and equipment such as seed, feed, fertilizer and farm machinery. Interviews and hires workers. Refers to soil-analysis data and records of past crops grown to ensure maximum production. Directs foremen/women supervising workers engaged in activities such as planting, cultivating and harvesting crops, and tending to farm animals such as beef and dairy cattle, sheep and hogs. Records operating expenses and prepares financial and other reports. Confers with various agencies to arrange for marketing of farm products. Plans and implements irrigation system, if required.

MAJOR GROUP 71

7131-118 MANAGER, LANDSCAPING (agric.)

Manages landscaping business to provide custom landscaping services and to maintain grounds of establishments and private homes: Ascertains customer's requirements. Prepares landscaping plans and designs with supporting drawings. Discusses plans with owner and draws up final proposal and cost estimates. Measures and lays out grounds according to plans. Orders trees, shrubs, flowers, flag stones and related landscaping supplies. Directs workers engaged in grading terrain, spreading top soil, applying fertilizer, seeding lawns, laying sod, planting trees, shrubs and flowers, mowing lawns, trimming and shaping trees, and spraying trees, shrubs and flowers to prevent or control insects, pests and blight. Records operating expenses and prepares financial statements and reports. Participates in duties of workers, if required.

GED: 4 SVP: 7 PA: M 5 7 EC: B DPT: 1 1 8

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>2</u> <u>3</u> <u>3</u> <u>2</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>5</u> <u>4</u>	6 2 5	4 1 5

7131-122 MANAGER, EGG-GRADING STATION (agric.)

Manages egg-grading station:

Purchases eggs from egg producers and arranges for delivery of cartons and crates to producer. Advises producers about problems with their produce to ensure good quality eggs. Solicits orders, secures new accounts and arranges delivery of eggs to stores. Orders crates, cartons, machinery and supplies. Interviews, hires and dismisses workers. Directs activities of egg-graders and other workers. Records operating expenses and prepares financial statements and reports.

GED: 4 SVP: 7 PA: S 5 EC: I DPT: 1 1 8

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>2</u> <u>3</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>5</u> <u>4</u>	2 6 5	4 5 1

7131-199 FARM MANAGEMENT OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with planning, organizing, supervising and controlling the operation of farms, farm holdings, landscaping businesses, or similar establishments on behalf of a private, collective or governmental owner, and related occupations not presently classified in Unit Group 7131.

718/719 – OTHER FARMING, HORTICULTURAL AND ANIMAL-HUSBANDRY OCCUPATIONS

This minor group includes other occupations concerned with activities related to farming, horticulture and animal husbandry. Activities include: raising crops, horticultural plants, poultry and livestock; operating farm machinery; spraying crops and livestock to control insects and plant and animal diseases; preparing produce for marketing; providing agricultural services; maintaining public and private grounds, parks, cemeteries and sports fields; and caring for animals, birds and marine life in research establishments, zoos, kennels, pounds, pet shops and aquariums. These occupations are classified in the following unit groups:

- 7180 Foremen/Women: Other Farming, Horticultural and Animal-Husbandry Occupations
- 7181 General Workers, Farm
- 7183 Field Crop and Vegetable-Growing Workers
- 7185 Orchard, Vineyard and Related Tree- and Shrub-Crop Workers
- 7187 Livestock Workers
- 7191 Dairy Workers, Farm
- 7193 Poultry and Hatchery Workers
- 7195 Nursery and Related Workers
- 7197 Farm-Machinery Operators and Custom Operators
- 7198 Occupations in Labouring and Other Elemental Work: Farming, Horticultural and Animal Husbandry
- 7199 Other Farming, Horticultural and Animal-Husbandry Occupations, n.e.c.

**7180-FOREMEN/WOMEN: OTHER FARMING,
HORTICULTURAL AND ANIMAL-HUSBANDRY
OCCUPATIONS**

This unit group includes occupations, as described under master title 01-250 SUPERVISOR; FOREMEN/WOMEN (any ind.), concerned with supervising and co-ordinating activities of workers engaged in planting, cultivating, spraying, irrigating and harvesting crops; breeding, raising and caring for animals and poultry; preparing produce for marketing; and maintaining parks, grounds and sports fields. These supervisors occasionally perform the activities of the workers supervised.

**7180-110 FOREMAN/WOMAN, DAIRY-FARM
WORKERS (agric.)**

Supervises and co-ordinates activities of workers engaged in raising and caring for dairy cattle (Unit Group 7191):
Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

**7180-114 FOREMAN/WOMAN, FIELD CROP AND
VEGETABLE WORKERS (agric.)**

Supervises and co-ordinates activities of workers engaged in cultivating, planting, harvesting and marketing field crops and vegetables (Unit Group 7183):
Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

**7180-118 FOREMAN/WOMAN, LIVESTOCK
WORKERS (agric.)**

Supervises and co-ordinates activities of workers engaged in caring for livestock such as beef cattle, sheep and fur-bearing animals (Unit Group 7187):
Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

**7180-122 FOREMAN/WOMAN, NURSERY AND RELATED
WORKERS (agric.)**

Supervises and co-ordinates activities of workers engaged in growing and marketing trees, shrubs and ornamental plants, and in providing services such as landscaping and gardening (Unit Group 7195):
Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

**7180-126 FOREMAN/WOMAN, FRUIT-FARM
WORKERS (agric.)**

Supervises and co-ordinates activities of workers engaged in cultivating, harvesting and marketing fruit (Unit Group 7185):
Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

**7180-130 FOREMAN/WOMAN, POULTRY-FARM
WORKERS (agric.)**

Supervises and co-ordinates activities of workers engaged in raising poultry and in primary marketing of poultry products (Unit Group 7193):
Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

7180-134 FOREMAN/WOMAN, PARK (agric.; amuse. & rec.)

Supervises and co-ordinates activities of workers engaged in maintenance of national, provincial and municipal parks and playgrounds (Unit Group 7195):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.). Supervises planting and transplanting of flowers in nursery and flower beds, and planting, pruning and trimming of trees and shrubs. Inspects camp sites, washrooms, water supply and other park facilities, and recommends improvements and repairs. Issues and obtains signatures for tools and other equipment. Directs maintenance and repair of walks, buildings and playground equipment. Supervises activities of workers engaged in projects such as clearing land, snow removal, and building roads and additional park sites during off season. Supervises registration of incoming vehicles and visitors, and issues camping and other permits.

GED: 4 SVP: 7 PA: L 5 EC: B DPT: 1 3 8

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> 4 4 4 4 4 4 4 4 4	2	1 4 5

7180-138 CUSTOM HARVESTER, GRAIN (agric.)

Contracts with farmers to provide machines and crews to harvest grain:

Contacts farmers to solicit business. Inspects crops to estimate acreage yields, and evaluates land contours, accessibility of crops to roads, hauling distances and loading requirements to determine cost of harvesting. Prepares and submits bid for cost of harvesting. Recruits or arranges for recruitment of harvest workers, and arranges for their living accommodation. Inspects grain to determine when it is ready to harvest. Supervises workers who move machines to farms, and who set up equipment and machines. Arranges with local suppliers for delivery of fuel, lubricants and other materials. Directs harvesting operations and inspects grain to ensure adequate processing. Directs movement of grain to storage or processing area. Prepares production and payroll records.

GED: 4 SVP: 7 PA: L 5 EC: O DPT: 1 3 8

MAJOR GROUP 71

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>3</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>5</u> <u>5</u>	2 9	1 4 5 9

7180-142 FOREMAN/WOMAN, SPRAYERS (agric.)

Supervise and co-ordinates activities of workers engaged in spraying roadsides to control weeds and to destroy grain-rust-producing spores (Unit Group 7199):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.). Instructs workers in methods of mixing specified spray solutions, applying sprays, and operating, cleaning, caring for and repairing equipment.

DPT: 1 3 7

7180-146 SHEEP-SHEARING CONTRACTOR (agric.)

Contracts with farmers to provide equipment and workers to shear sheep:

Contacts farmers to solicit business. Hires, trains and supervises workers who shear sheep and perform related duties. Provides, sets up and tests shearing equipment. Prepares time, production and other records. Pays crew members. Arranges for transportation, food, and living quarters, camp site or other accommodation for crew, if required. Shears sheep.

GED: 4 SVP: 7 PA: L 4 5 EC: O DPT: 1 3 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>5</u> <u>5</u>	2 1	4 5 1

7180-150 SUPERINTENDENT, GREENS (agric.; amuse. & rec.)

Supervises and co-ordinates activities of workers engaged in maintaining grounds, greens and turf of golf course in playing condition (Unit Group 7195):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.). Confers with club authorities to plan and review work projects and priorities. Arranges for soil tests to determine nutrients required. Selects and purchases grass seed, trees, shrubs, plants, fertilizers, equipment and other supplies. Supervises mixing and preparing of spray and dust mixtures. Supervises spraying and dusting of grounds. Selects spots for flag placement. Assists workers engaged in maintenance and repair of mechanical equipment. Prepares annual budget for approval by club authorities.

GED: 4 SVP: 7 PA: L 4 5 6 EC: B DPT: 1 3 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u>	2 1	1 4 5

7180-154 FOREMAN/WOMAN, ZOO (agric.; amuse. & rec.)

Supervises and co-ordinates activities of workers engaged in caring for and exhibiting animals in zoos (Unit Group 7199):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.). Supervises placement of exhibits and animals. Inspects exhibits, animals and work areas to ensure proper standards are maintained. Supervises moving of animals from summer to winter quarters. Prepares reports on health of animals, number of visitors and related matters.

GED: 3 SVP: 7 PA: L 5 EC: B DPT: 1 3 8

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>5</u> <u>5</u>	2 1	1 4 5

7180-158 FOREMAN/WOMAN, HATCHERY WORKERS (agric.)

Supervises and co-ordinates activities of workers engaged in operating an egg hatchery (Unit Group 7193):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

7180-199 FOREMEN/WOMEN: OTHER FARMING, HORTICULTURAL AND ANIMAL-HUSBANDRY OCCUPATIONS, N.E.C.

This group includes foremen/women of other farming, horticultural and animal-husbandry occupations, not elsewhere classified, and related occupations not presently classified in Unit Group 7180.

7181-GENERAL WORKERS, FARM

This unit group includes occupations concerned with activities on a ranch, dairy farm or general farm, such as operating farm machinery to plant, cultivate, fertilize, irrigate, spray and harvest crops; caring for animals and poultry; preparing produce for marketing; repairing and maintaining farm machinery, equipment and buildings; and keeping house for owner of ranch or farm.

7181-110 FARM WORKER, GENERAL (agric.)

Performs general duties related to growing crops and raising livestock or poultry:

Operates tractor, plow, combine and other machinery to cultivate soil and to plant and harvest crops. Services machinery and makes minor repairs. Repairs farm buildings and fences, using hand and power tools and tractor-powered auger. Drives truck or tractor-drawn wagon to haul feed for livestock and to transport produce to market. Observes condition of poultry or livestock to detect disease or injury. Puts vaccine in drinking water of poultry and injects serum into cattle, using hypodermic needle, to immunize animals. Carries and distributes feed to animals and poultry. Operates mechanical devices to feed cattle, hogs or poultry, and to clean stables and pens. Cleans and

disinfects poultry pens and houses to prevent disease. Cleans barnyard buildings, using pitch fork and shovel.

GED: 3 SVP: 5 PA: M 2 3 4 EC: B 5 6 DPT: 3 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 4 4 4 3 4 3 3 4	1 9	1

7181-114 FARM COUPLE (agric.)

Performs general duties related to growing crops, raising livestock or poultry and keeping house for resident or non-resident owner of general farm, ranch or dairy-farm:

Prepares meals, cleans house, washes and dries clothes and performs related housekeeping duties for own family, owner and farm workers. Operates farm machinery to plant, cultivate and harvest crops. Irrigates land and maintains irrigation system. Feeds and waters livestock and poultry by hand or using mechanical aids. Cleans and disinfects poultry houses. Gathers and packages eggs. Herds livestock to and from grazing area. Assists at birth of animals. Assists in immunizing, dehorning, branding and tagging operations. Milks cows by hand or using milking machine. Cleans and disinfects milking equipment. Cleans stables, pens and enclosures by hand or using power equipment. Packs or bags produce. Loads produce and animals onto vehicles. Drives vehicles to transport produce and animals to market, and unloads vehicles. Maintains grounds and buildings. Services and makes minor repairs to machinery and equipment.

7181-199 GENERAL-FARM WORKERS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with activities on a ranch, dairy farm or general farm, and related occupations not presently classified in Unit Group 7181.

7183-FIELD CROP AND VEGETABLE-GROWING WORKERS

This unit group includes occupations primarily concerned with growing vegetables, mushrooms, and field crops such as grain, hops, tobacco and sugar-beets. Activities include: transplanting seedlings; operating farm machinery; planting, cultivating, fertilizing, irrigating, spraying and harvesting crops and vegetables; repairing and maintaining farm machinery, equipment and buildings; and preparing produce for marketing.

7183-114 FARM WORKER, GRAIN/OILSEED (agric.)

Plants, cultivates and harvests grain and oilseed crops:

Operates farm machinery to cultivate and fertilize soil. Fills seeder hopper with seed and operates tractor-drawn seeder to plant crop. Mixes chemical solutions used for spraying crops. Operates tractor-drawn sprayer and sprays crops to destroy weeds and insects and to control disease. Irrigates soil and maintains irrigation system. Operates self-propelled or tractor-drawn machinery to harvest crops. Drives truck to transport produce to elevator or storage area. Services and makes minor repairs to machinery and equipment. Maintains and repairs farm buildings.

GED: 2 SVP: 5 PA: M 4 8 EC: O 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 3 4 5 4 4 3 3 4	9 1	1 3

7183-118 FARM WORKER, MUSHROOM (agric.)

Plants, cultivates and picks mushrooms:

Operates machines which mix and ferment compost to produce suitable medium for growing mushrooms. Operates hand sprayer to spray and dust mushroom houses with insecticides and chemicals before and during growing cycle. Dumps compost onto conveyor belt for transport to trays and benches in mushroom houses. Turns valves to operate steam injection system to sterilize compost. Operates mechanical equipment or uses hand tools to distribute and mix mushroom spawn throughout compost. Waters mushroom beds. Picks mushrooms, and grades and packs them according to size. Dumps compost on conveyor belt to remove it from mushroom houses after harvest. Drives truck to deliver spent compost for sale as fertilizer.

GED: 2 SVP: 4 PA: M 4 EC: I 4 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 4 5 3 4 3 5 4	1 9	1 3

7183-122 FARM WORKER, VEGETABLE (agric.)

Plants, cultivates and harvests vegetables:

Operates farm machinery to cultivate and fertilize soil. Mixes greenhouse soil with nutrients to prepare it for planting. Operates machinery and uses garden tools to plant seeds and seedlings in fields and greenhouses. Thins, weeds and hoes row crops. Mixes chemical solutions and operates tractor-drawn and manual sprayers to spray vegetables to control insects and to prevent plant diseases. Irrigates soil and maintains irrigation system. Erects supports for climbing vegetables and for protection of plants. Prunes and thins plants to promote growth. Operates farm machinery and uses hand tools to harvest vegetables. Operates shelling machine to shell vine crops. Trims, washes and sorts vegetables by hand or using mechanical equipment. Bunches, bags or packs vegetables for marketing. Services and makes minor repairs to machinery and equipment. Maintains and repairs farm buildings.

GED: 2 SVP: 5 PA: M 3 4 8 EC: O DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 3 4 5 3 4 3 3 4	1 9	1 3

7183-126 FARM WORKER, TOBACCO (agric.)

Plants, cultivates and harvests tobacco:

Mixes nutrients with soil in greenhouse to prepare soil for planting, and plants tobacco seeds. Cultivates and waters tobacco seedlings and controls temperature of greenhouse. Operates farm machinery to cultivate and fertilize field soil. Transplants seedlings in fields, by hand or using tractor-drawn planter. Irrigates soil and maintains irrigation system. Mixes chemical solutions and operates tractor-drawn sprayer to destroy weeds and to control disease. Breaks tops and suckers from plants and sprays or sponges oil on tops of plants to retard growth of

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suckers. Primes (picks) mature tobacco leaves and cuts down mature burley plants. Operates tractor-drawn machinery to transport harvested tobacco from field to kilns. Ties or machine-stitches leaves to slats, and hangs slats of leaves in kiln. Strips cured leaves from slats and packs cured leaves in bales for marketing.

GED: 2 SVP: 5 PA: H 3 4 8 EC: O DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 3 4 5 3 4 3 3 4	1 9	1 3

7183-130 FARM WORKER, SUGAR-BEET (agric.)

Plants, cultivates and harvests sugar-beets:

Operates farm machinery to cultivate and fertilize soil. Fills tractor-drawn planter with seed and fertilizer and operates planter to plant and fertilize seed. Irrigates soil and maintains irrigation system. Thins and weeds sugar-beets. Mixes chemical solutions and operates tractor-drawn sprayer to spray sugar-beets for weed and disease control. Operates topping machine to remove leaves and tops of sugar-beets. Operates harvesting machine to dig and load sugar-beets into truck. Drives truck to transport sugar-beets to processing plant. Services and makes minor repairs to machinery and equipment. Maintains and repairs farm buildings.

GED: 2 SVP: 5 PA: M 3 4 8 EC: O DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 3 4 5 3 4 3 3 4	1 9	1 3

7183-199 FIELD CROP AND VEGETABLE-GROWING WORKERS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with growing field and vegetable crops, and related occupations not presently classified in Unit Group 7183.

substance to cut surface of trees or shrubs to seal them against insects and to prevent disease, rot, and loss of sap. Sprays trees and vines with chemicals to control insects, fungus growth and disease. Cuts grass around trees. Props branches to prevent them from breaking under weight of fruit. Harvests, grades, sorts and packs fruit and berries. Drives truck to transport produce to market.

GED: 2 SVP: 5 PA: M 2 3 4 8 EC: B 5 6 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 3 5 3 4 3 3 4	1 9	1 9

7185-199 ORCHARD, VINEYARD AND RELATED TREE- AND SHRUB-CROP WORKERS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with growing fruit, and related occupations not presently classified in Unit Group 7185.

7187-LIVESTOCK WORKERS

This unit group includes occupations primarily concerned with attending to livestock, such as cattle, horses, sheep, hogs and fur-bearing animals. Activities include: feeding and watering animals; breaking, training and exercising racehorses and draft horses; shoeing horses; cleaning stables, pens and enclosures; shearing and docking sheep; dehorning and branding cattle; killing and skinning fur-bearing animals; and preparing related produce for marketing.

7187-110 HORSE TRAINER (agric.; amuse. & rec.)

Directs, supervises and performs activities to train saddle and harness-racing horses:

Purchases equipment and supplies. Hires and trains workers. Bridles and saddles racehorses, and harnesses and hitches harness-racing horses to sulks to accustom horses to equipment. Drives horses on racetrack to familiarize them with starting devices, gates and lights. Plans and supervises training schedules. Feeds, grooms and exercises horses, or supervises other workers engaged in feeding, grooming and exercising horses. Examines and treats horses for illness or injury. Enters and drives horses in races. Prepares records of operational costs and horses' progress and performance. Advises owner regarding breeding program.

GED: 4 SVP: 7 PA: L 2 4 5 EC: B 6 DPT: 1 2 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 4 4 4 4 4 3 4 5	6 2 0	9 4

7185-110 FARM WORKER, FRUIT (agric.)

Plants, cultivates and harvests fruit to assist fruit farmer in farming operations:

Operates motorized farm equipment to cultivate soil, distribute fertilizers and haul products and supplies. Operates tractor-operated auger to dig holes and plant fruit trees. Plants grape-vines and berry plants, using garden tools. Irrigates crops, using fixed or moveable sprinkler systems. Removes immature fruit, to prevent breaking of branches due to excess weight and to increase quality of remaining fruit. Prunes trees and plants, using ladder, saw and clippers. Applies protective

7187-114 HORSE BREAKER (agric.; amuse. & rec.)

Breaks draft and racehorses:

Feeds and talks to horses to gain their confidence. Bridles and saddles racehorses, adjusts mouth bit, handles reins, and gives verbal commands to accustom horses to equipment, rein controls and commands. Harnesses and teams draft horse to be broken with experienced horse, hitches horses to vehicle, and handles reins to accustom unbroken

horse to being driven. Lies and sits on racehorse's back in stall or corral, and rides horse to accustom horse to rider. Harnesses harness-racing horse, hitches horse to sulky, and trains horse to pull sulky.

GED: 3 SVP: 7 PA: M 2 4 EC: O 6 DPT: 6 2 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 4 4 5 <u>4</u> 4 <u>3</u> 3 5	6 0	6 8

7187-118 HORSESHOER (agric.; amuse. & rec.)

Shapes, fits and nails horseshoes to horses' hooves:

Consults with owner of horse to determine type of shoe desired. Cuts clinches holding shoe onto hoof, and pulls off worn or defective shoe. Examines hoof to assess its general condition. Trims and shapes hoof with knife, pincers and rasp. Measures and examines hoof to determine size and shape of shoe, and amount of padding required between shoe and hoof. Cuts and shapes leather and sponge padding. Selects shoe size, and positions shoe against hoof to determine amount of shaping required. Operates welding equipment or propane torch, or fires forge to heat shoe to required temperature. Holds shoe with pincers, and positions shoe on anvil. Hammers shoe to size. Positions padding and shoe on hoof, and nails padding and shoe to hoof. Trims hoof flush with shoe, using rasp. Cuts and shapes shoes from steel rods, if required, using hacksaw, welding equipment, anvil and hand tools.

GED: 3 SVP: 6 PA: M 3 4 EC: I 6 DPT: 6 7 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 <u>4</u> 4 5 <u>3</u> 3 <u>3</u> 4 5	1 3	Y 2

7187-122 FARM WORKER, HOGS (agric.)

Breeds, raises and markets hogs:

Moves sows to temperature-controlled area at farrowing time to provide protection for new-born pigs. Weighs new-born pigs, and records weight, sex and number of pigs in litter. Mixes formula and feeds young pigs. Castrates young boars. Herds pigs into enclosures and segregates pigs according to age. Assists in immunizing pigs. Operates farm machinery to plant, cultivate and harvest crops used for feed. Operates machinery to grind, mix and transport feed to feeding stations. Fills automatic feed dispensers or fills feed troughs by hand. Adds special rations to hogs' feed to control internal parasites. Dusts or sprays hogs to control insects. Clamps rings in hogs' snouts to prevent rooting. Cleans and disinfects pens and enclosures, and spreads straw or shavings for bedding. Weighs hogs and loads them onto truck. Drives truck to stockyard or market.

GED: 3 SVP: 5 PA: H 3 4 8 EC: B DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 4 4 <u>3</u> 4 <u>3</u> 3 5	1 9	1

7187-126 RANCH WORKER (agric.)

Attends to beef cattle, sheep, and horses on ranch or farm: Rides horse to patrol range, to herd animals, and to inspect water supply and fencing. Locates stray sheep and guards them against predators, working with trained dogs. Operates farm machinery to plant, cultivate and harvest crops used for feed. Feeds animals by hand or using mechanical feeding equipment. Cares for animals giving birth. Immunizes or assists in immunization of animals, using serum and hypodermic syringe. Assists in dehorning, branding and castrating cattle, and in tagging and shearing sheep. Cleans barns, enclosures and pens by hand or using mechanical equipment. Trains and cares for own horse. Maintains and repairs ranch buildings and enclosures. Loads animals into truck, drives truck to market, and unloads animals.

GED: 3 SVP: 5 PA: M 2 3 4 8 EC: O DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 <u>4</u> 5 <u>3</u> 4 <u>3</u> 3 5	1 9	1

7187-130 FUR-FARM WORKER (agric.)

Cares for animals on fur farm or related establishment: Adjusts heating controls to maintain specified housing temperature for animals. Operates grinders to prepare feed for animals, and adds vitamins to feed. Operates conveyors or drives vehicle to transport feed to feeding stations. Feeds and waters animals. Cleans and disinfects pens and enclosures. Assists in immunizing animals. Treats minor injuries and reports illness or injuries. Kills animals, using electrical stunning device and knife. Skins animals and removes flesh from pelts, using knife. Stores pelts in refrigerator, or places pelts in rotating drums and operates drum controls to dry pelts. Arranges for shipping of pelts to market.

GED: 3 SVP: 4 PA: M 3 4 EC: B DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 <u>4</u> 5 <u>3</u> 3 <u>3</u> 4 5	1 9	1 Y

7187-134 EXERCISER, RACEHORSE (agric.; amuse. & rec.)

Rides or drives racehorse to exercise and condition horse for racing: Saddles and rides racehorse or harnesses and drives harness-racing horse, according to specific instructions from trainer. Observes physical condition of horse and any peculiarities, such as shyness or dislike of whip. Reports observations to trainer so that changes can be made to exercising program, or to harness or other equipment. Recommends use of equipment such as blinders or whip. Clocks time and stride of horse on measured course.

GED: 2 SVP: 4 PA: M 2 4 EC: O 6 DPT: 6 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 4 5 <u>4</u> 4 <u>3</u> 4 5	3 6	3

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7187-136 SHEARER, SHEEP (agric.)

Shears wool from sheep:

Herds sheep or directs other workers to herd sheep to shearing station. Places sheep on shearing platform. Operates hand or power-driven clippers to shear wool close to skin and to remove fleece in one piece. Presses on skin to stretch it to prevent nicks and cuts during shearing. Directs workers to herd shorn sheep from shearing station into pen. Spreads fleece with hide side up on floor, rolls fleece into compact bundle, and ties it with twine.

GED: 2 SVP: 3 PA: M 3 4 EC: I 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 <u>3</u> 5 <u>3</u> <u>3</u> 3 4 5	3 1	2 Y

7187-138 LEAD-PONY RIDER (agric.; amuse. & rec.)

Rides lead pony to guide racehorse and jockey from paddock to starting gate at racetrack:

Saddles and rides lead pony, and leads racehorse from barn to paddock for saddling and mounting by jockey. Leads racehorse and jockey to starting gate. Assists outriders and jockey to control racehorse at starting gate. Leads racehorse around track to exercise horse as directed by trainer. Grooms, feeds and cares for lead pony.

GED: 2 SVP: 3 PA: M 2 3 4 EC: O 6 DPT: 6 7 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 4 5 <u>4</u> 4 <u>3</u> 4 5	3 6	3

7187-142 YARD ATTENDANT, LIVESTOCK (slaught. & meat pack.; whole. trade)

Segregates, feeds and cares for livestock in transit at stockyard or meat-packing plant:

Loads and unloads livestock. Drives livestock to killing or loading chutes or into pens or enclosures according to type, using stick or canvas belt. Marks livestock with tags and hooks or stamping device for identification purposes. Counts animals to verify receipts, and signs bills of lading. Weighs livestock on platform scales, and records identification data and weight. Feeds and waters livestock. Cleans pens, enclosures, alleyways and troughs, by hand or using mechanical equipment.

GED: 2 SVP: 2 PA: M 4 EC: B 6 7 DPT: 5 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 4 <u>4</u> 4 <u>3</u> 4 5	3 1	2 3

7187-146 GROOM (agric.; amuse. & rec.)

Feeds, exercises and cares for horses at farm or racetrack stables:

Measures and mixes specified amounts of feed supplements and grains. Feeds and waters horses. Provides measured amounts of water at specified times for racehorses. Examines horses to detect disease or injury, and reports observations to superior. Administers medication as directed. Grooms horses, and trims manes and tails with scissors.

Harnesses and leads horses or operates mechanical equipment to exercise horses. Cleans stables, pens and troughs by hand or using mechanical equipment. Spreads fresh bedding of straw or shavings in stalls or pens. Unloads supplies from trucks, and operates conveyor or pushes cart to transfer supplies to storage area. Drives truck or horse trailer to transport horses to and from racetrack. Records feeding and other data concerning horses on chart. Fits pregnant mares with urine-collector device, and attaches hose to main collector pipe to collect urine for sale to pharmaceutical-manufacturing establishments. Operates fork-lift to load drums of urine onto truck and to store empty drums.

GED: 2 SVP: 2 PA: H 4 EC: B DPT: 6 7 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 5 <u>3</u> 4 <u>3</u> 4 5	3 1	3 Y

7187-199 LIVESTOCK WORKERS, N.E.C.

This group includes occupations, not elsewhere classified, primarily concerned with attending to livestock and preparing related products for marketing, and related occupations not presently classified in Unit Group 7187.

7191-DAIRY WORKERS, FARM

This unit group includes occupations primarily concerned with feeding and watering dairy cattle; milking cows; cleaning stables; cleaning and disinfecting milking equipment and milk storage containers; preparing dairy products for primary marketing; operating farm machinery; to plant, cultivate and harvest crops used to feed cattle; and repairing and maintaining farm machinery, equipment and buildings.

7191-110 FARM WORKER, DAIRY (agric.)

Attends to dairy cattle on farm, and operates farm machinery to plant, cultivate and harvest feed for stock:

Operates farm machinery to plant, cultivate and harvest feed for stock. Weighs, mixes and measures feeds and feed supplements. Feeds and waters cattle. Examines cows to detect diseases, and applies medication to cuts and bruises. Assists in calving operations and in dehorning of calves. Operates mechanical or hand sprayer to spray stable and cows with insecticide. Cleans stables and barns, and spreads clean bedding. Operates automatic conveyor equipment to remove refuse in barn, or removes refuse with pitchfork or shovel. Washes cows' udders with disinfectant prior to milking. Milks cows, using milking machine, or milks cows by hand and pours milk into containers. Washes bulk coolers, milk containers and equipment, and rinses them in disinfectant solution. Maintains records of cows' feed consumption and milk production. Maintains and repairs farm buildings. Services and makes minor repairs to machinery and equipment.

GED: 3 SVP: 5 PA: H 2 3 4 8 EC: B 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 4 <u>3</u> 4 <u>3</u> 4 4	1 9	1 Y

7191-114 TENDER, MILKING MACHINE (agric.)

Tends machine that milks dairy cows:

Cleans cow's teats and udder with disinfectant. Squeezes teat to collect sample of milk for examination. Examines sample for curd and blood. Starts milking machine and attaches cups of machine to teats. Observes machine's performance and cow's reaction during milking. Removes cups as soon as cow is milked to prevent injury to udder. Cleans and disinfects equipment. Cleans stables, feeds and waters cattle, and spreads fresh bedding.

GED: 2 SVP: 2 PA: L 3 4 EC: I 7 DPT: 6 8 5

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 4 <u>4</u> 5 <u>4</u> 4 <u>3</u> 4 5	1 3	2 3

7191-199 DAIRY-FARM WORKERS, N.E.C.

This group includes occupations, not elsewhere classified, primarily concerned with caring for dairy cattle, preparing dairy products for primary marketing, and performing related duties, and related occupations not presently classified in Unit Group 7191.

7193-POULTRY AND HATCHERY WORKERS

This unit group includes occupations primarily concerned with feeding and watering poultry; tending incubators; cleaning and disinfecting hatcheries, shelters, brooders and pens; and preparing poultry products for marketing.

7193-110 FARM WORKER, POULTRY (agric.)

Attends to poultry on farm or establishment concerned with raising poultry for egg production and for sale of meat:

Cleans and disinfects brooders to prevent disease. Places young birds in temperature-controlled brooders. Feeds and waters poultry, and adds vaccines to water as directed. Segregates poultry in pens according to age and size. Trims beaks to prevent cannibalism and fighting among poultry, using debeaking machine. Trims wings with shears to prevent poultry from flying. Collects eggs from nests or from conveyor. Packages eggs in cartons and crates. Fences range area for turkeys, ducks and geese, places shelters on high ground, and changes location of shelters periodically. Cleans and disinfects poultry houses, shelters and grounds. Reports signs of disease to superior.

GED: 3 SVP: 4 PA: M 3 4 EC: B 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 <u>4</u> 4 <u>3</u> 4 <u>3</u> 4 4	1 9	1

7193-114 FARM WORKER, PHEASANT (agric.)

Attends to pheasants raised to stock game preserves and for sale of chicks, mature pheasants or meat:

Operates farm machinery to seed area to provide natural environment for breeding stock. Cleans, disinfects and repairs cages. Positions cages over grassy area, and places breeding stock in cages. Collects eggs, places them in incubator, and monitors temperature of incubator. Mixes feed according to age of pheasants. Feeds and waters

pheasants. Clips wings of breeding stock to prevent them from flying. Trims beaks to prevent cannibalism and fighting among pheasants, using debeaking machine and clippers. Sets traps to catch predators. Crates mature pheasants and loads them into vehicle. Drives vehicle to transport pheasants to game preserve, and releases pheasants. Kills and dresses pheasants, and places them in freezer or delivers them to customers. Boxes and crates chicks and pheasants for shipment.

GED: 3 SVP: 4 PA: M 3 4 EC: B 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 <u>4</u> 4 <u>3</u> 4 <u>3</u> 4 4	1 9	1

7193-118 HATCHERY WORKER (agric.)

Attends to eggs and chicks in hatchery:

Loads crates of graded eggs from refrigerator unit into truck. Drives truck to transport eggs to hatchery, and unloads eggs from truck. Operates vacuum lift to transfer eggs from crates to incubator trays. Places incubator trays in setting incubator for specified time. Operates vacuum lift to transfer eggs from setting incubator to hatching trays, and places trays in hatching incubator for specified time. Replaces defective indicator lights on incubators. Removes trays of chicks from incubator and culls chicks. Dubs (decombs) chicks, using small scissors. Trims beaks to prevent chicks from injuring one another, using debeaking machine. Injects chicks with vaccine to prevent disease. Places chicks in cartons for shipping.

GED: 2 SVP: 3 PA: M 4 EC: I 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 <u>4</u> 4 <u>3</u> 4 <u>3</u> 4 4	1 3	1 2

7193-199 POULTRY AND HATCHERY WORKERS, N.E.C.

This group includes occupations, not elsewhere classified, primarily concerned with caring for poultry and preparing poultry products for marketing, and related occupations not presently classified in Unit Group 7193.

7195-NURSERY AND RELATED WORKERS

This unit group includes occupations concerned with growing and marketing trees, shrubs and ornamental plants, and providing landscaping, groundskeeping and gardening services. Activities include: preparing soil; planting seeds and bulbs; transplanting seedlings; planting, transplanting, pruning and treating trees and shrubs; spraying plants, trees and shrubs to control insects and diseases; gathering evergreens and other plants for decorative purposes; and landscaping and maintaining public and private grounds, parks, cemeteries and sports fields.

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7195-110 TREE SURGEON (agric.; gov. serv.)

Prunes and treats trees and shrubs in parks, along streets, and on private property:

Examines trees and shrubs to assess treatment required and methods to be used. Climbs ladder, or stands on truck-mounted hydraulic platform to gain access to upper branches. Cuts off dead and diseased limbs and trims and shapes upper branches to improve health and appearance of trees and shrubs, using chain saw, hand saw and pruning tools. Joins broken branches with bolts and cable to brace trees, using drill and block and tackle. Scrapes decayed wood from cavities in trees, using axe and rasp. Applies tar or other protective substance to repaired or broken surfaces to prevent rot, loss of sap, or infestation by insects. Dusts trees and shrubs, or operates truck-mounted pressurized sprayer or handsprayer to spray trees and shrubs to control insects and plant disease. Applies fertilizer around base of trees and shrubs, using portable and power-operated spraying and dusting equipment, or inserts hollow pipe into ground and pours in liquid fertilizer. Plants shrubs, using mechanized equipment and shovel. Operates power-driven auger and truck-mounted crane to plant trees. Drills holes in diseased trees, prepares and measures solution, and injects trees with solution to treat trees, using syringe. Prepares work records. Directs workers in related duties.

GED: 4 SVP: 6 PA: H 2 3 4 EC: O 6 DPT: 2 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> 3 4 3 <u>3</u> 4 <u>3</u> 4 <u>3</u> 3 4	1 9 0	9 0 4 1

7195-112 PLANT DOCTOR (agric.)

Provides plant care in business establishments and private homes: Loads soil, fertilizer, insecticides, fungicides and gardening equipment into motor vehicle. Examines soil, leaves and stalk of plant to determine conditions affecting health, growth or appearance of plant. Explains treatment of plant to client. Mixes spray solutions, and operates handsprayer to spray plant for control of insects, disease and fungus. Waters and fertilizes plant, and instructs client in routine plant care. Checks heat, humidity and lighting to ensure correct environment is provided for plant. Prunes plant with shears, and repots small plants. Transports large plants to greenhouse for transplanting or additional treatment by other workers. Prepares operational records. Prepares and submits plans and cost estimates for indoor plant landscaping, if required.

GED: 3 SVP: 6 PA: M 3 4 5 6 EC: I DPT: 3 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 3 4 4 <u>3</u> 4 4 <u>3</u> 4 3	1 2 9	9 0

7195-114 PARK CARETAKER (gov. serv.)

Directs activities of workers engaged in maintaining grounds, buildings and roads in municipal park, and provides information to public: Directs park workers engaged in maintaining and cleaning park grounds, buildings, roads and facilities. Recommends replacement of trees and shrubs, and purchase of flowers, plants, supplies and equipment. Informs public of park regulations, facilities and activities. Registers campers, and assigns camping sites. Inspects grounds and buildings to determine maintenance requirements and to ensure observance of park regulations.

GED: 3 SVP: 5 PA: L 5 6 EC: B DPT: 3 3 8

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> 3 4 4 <u>3</u> 4 4 4 4 5 5	2	1 9

7195-118 CEMETERY WORKER (agric.)

Prepares graves and maintains cemetery grounds:

Locates grave site by section, lot and plot number, according to cemetery plans. Operates snow-removal equipment to clear roads, walkways and grave site. Operates sod lifter or uses shovel to remove sod from grave site. Operates mechanical equipment to dig grave to specified depth and to deposit earth on plywood sheet or in storage area. Covers earth at grave site with artificial grass carpet. Lines sides of grave with plywood sheets and bracing timbers to prevent cave-in. Positions casket-lowering device over grave. Operates mechanical equipment to fill in grave and to replace sod after funeral. Places cremated remains in grave, urn garden, or in mausoleum after funeral. Cleans mausoleum. Plants and trims shrubs, trees and flowers, using garden tools. Positions and tends fixed or portable sprinkler system to water shrubs, trees, grass and flowers. Pushes hand or power mower or drives tractor mower to cut grass. Makes minor repairs to roads, pathways, fences and buildings.

GED: 3 SVP: 3 PA: H 3 4 EC: O DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 <u>4</u> 4 4 <u>3</u> 4 <u>3</u> 3 5	1 3 9	2 Y

7195-122 NURSERY WORKER (agric.)

Plants, cultivates and harvests trees, shrubs and ornamental and flowering plants in greenhouse and nursery:

Mixes soil, humus and fertilizer in bins to prepare soil. Fills flats in greenhouse with prepared soil, using garden tools and mechanical equipment. Plants flowers and shrub and tree seeds in flats. Plants bulbs in pots. Labels flats and pots. Transplants flower, shrub and tree seedlings and rooted cuttings in beds, flats and pots, and labels each container. Positions and regulates green house sprinkler system. Weeds beds, flats and pots. Mixes chemicals and operates pressurized handsprayer to spray plants for insect and disease control. Operates farm machinery to cultivate, fertilize and spray outdoor beds and fields. Transplants flower plants, shrubs and trees in outdoor beds and fields, by hand or using farm machinery. Grafts trees under supervision, and prunes trees and shrubs. Tends irrigation system to water outdoor beds and fields. Digs shrubs and trees, and wraps roots in protective covering for marketing. Operates power saw to cut down Christmas trees. Loads produce onto truck, drives truck to market, and unloads truck. Provides information to customers, and assists them in selection and purchase of products.

GED: 3 SVP: 3 PA: H 3 4 EC: B DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 <u>4</u> 5 <u>3</u> 4 <u>3</u> 3 4	1 3 9	2 Y

7195-126 GROUNDS KEEPER (agric.)

Maintains grounds of commercial establishments and private and public buildings:

Operates mechanical equipment to cultivate and seed areas with grass. Plants and transplants trees, shrubs and flowers, using mechanical equipment and garden tools. Operates mechanical equipment or pushes spreader to apply fertilizer to grass, shrubs and flowers. Drives or pushes power mower to cut grass. Positions and tends fixed or portable sprinkler system to water plants, trees and grass. Trims and edges flower beds, walks, and around walls, using garden tools. Prunes and clips shrubs and hedges to improve appearance and to promote growth, using manual or power shears. Paints and repairs fences, gates and buildings. Assists in construction of buildings and other structures. Operates snow-removal equipment to clear walks, driveways and parking areas. Services and makes minor repairs to mechanical equipment.

GED: 2 SVP: 3 PA: M 3 4 EC: O DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 3 4	1 3 9	2 Y

7195-130 GROUNDS KEEPER, SPORTS FACILITY (agric.; amuse. & rec.)

Maintains grounds of racetrack, football field, baseball park, golf course, tennis court, or other sports facility, working alone or as crew member:

Drives or pushes power mower to cut grass. Seeds and sods turf, using garden tools. Operates mechanical equipment and uses garden tools to prepare beds and to plant flowers, shrubs and trees. Positions and tends fixed or portable sprinkler system to water flowers, shrubs, trees and turf. Operates mechanical equipment to smooth and level infield surfaces of athletic fields and racing tracks. Operates vehicle to remove and replace artificial turf. Operates motorized marking machine to mark baselines of baseball diamond and lines on football field and tennis court. Operates hoist equipment to position or remove football goal posts. Secures goal posts to sleeves in ground, using hand tools. Positions and removes protective tarpaulin of playing fields. Cleans and maintains tennis courts. Operates mechanical equipment to construct sand traps on golf courses. Drives snowmobile equipped with drag device to prepare trails for skiing. Operates mechanical equipment to cover ice surface of arena with wood sections, if required. Operates snow-removal equipment to clear walks, roads, parking areas and stands. Cleans, paints and repairs stands, buildings and fences. Drives truck to pick up and dispose of garbage.

GED: 2 SVP: 3 PA: M 3 4 EC: O DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 3 4	1 3 9	2 Y

7195-134 PARK WORKER (agric.; amuse. & rec.)

Maintains grounds and buildings of federal, provincial or municipal parks:

Operates rotary cultivator to cultivate soil. Seeds, sods and rakes lawns. Drives or pushes power mower to cut grass. Trims lawn edges with edger and clippers. Digs beds for trees, flowers and shrubs. Plants trees, flower and shrubs. Operates tractor-drawn implement or pushes spreader to fertilize lawns. Waters trees, shrubs, lawns and

flower beds. Prunes and trims trees, shrubs and hedges with clippers. Weeds flower beds and areas around trees and bushes. Cleans buildings, and cleans and disinfects washrooms. Paints benches, tables and guard rails. Places benches, tables and other park equipment in appropriate locations. Repairs and assists in repairing buildings, walks and roads. Picks up litter from grounds. Drives garbage truck and picks up and disposes of garbage. Operates snow-removal equipment and uses shovels to remove snow from paths and roadways. Operates power saw to cut down damaged trees and limbs, and cuts them to stove lengths for use by campers.

GED: 2 SVP: 2 PA: H 3 4 EC: O DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 3 4	1 3 9	2 Y

7195-138 TREE-SURGEON HELPER (agric.; gov. serv.)

Helps tree surgeon to prune and treat trees and shrubs in parks, along streets, and on private property:

Obtains tools, supplies and equipment, and makes them available for use by tree surgeon. Climbs ladder, or stands on truck-mounted hydraulic platform to gain access to upper branches. Cuts off dead and diseased limbs and trims and shapes upper branches to improve health and appearance of trees and shrubs, using chain saw, hand saw and pruning tools. Helps to join broken branches with bolts and cable, using drill and block and tackle. Cuts down dead, diseased or badly-damaged trees, using axe, hand saw or chain saw. Loads trees, limbs, brush and trash onto truck. Applies tar or other protective substance to repaired or broken surfaces to prevent rot, loss of sap, or infestation by insects. Mixes chemical solutions, and helps to spray, dust and inject diseased trees and shrubs. Helps to plant trees and shrubs, using hand and power tools. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 2 PA: H 2 3 4 EC: O 6 DPT: 6 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 3 4	1 3	2 3

7195-142 EVERGREENS PICKER (agric.; forest. & log.)

Cuts and gathers evergreen boughs and native plants for use in displays and holiday decorations:

Selects and cuts off lower pine, cedar and fir boughs from trees, using pruning shears and saw. Selects and cuts ferns, boxwood, salal, huckleberry and holly, using clippers and pruning shears. Gathers cuttings into bundles according to species, and carries bundles to loading area. Packs bundles in containers, and loads containers onto truck.

GED: 2 SVP: 2 PA: H 3 4 EC: O DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 <u>4</u> 5 4 4 <u>3</u> 4 4	1 3	2 3

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7195-146 LANDSCAPE WORKER (agric.)

Assists in landscaping grounds around homes and commercial and industrial establishments:

Operates mechanical equipment and uses garden tools to grade and spread top soil in preparation for laying sod or seeding lawn. Lays sod, using garden tools. Pushes spreader to apply grass seed and fertilizer. Operates mechanical equipment to dig holes and trenches for shrubs and hedges. Loads flagstones, flowers, peat moss and other supplies into wheelbarrow, and pushes wheelbarrow to worksite. Plants flowers, bulbs, shrubs and hedges according to prepared plan. Mixes chemical solutions and operates pressurized hand sprayer to spray plants for weed and insect control. Lays flagstones. Waters lawns, flowers and shrubs. Drives or pushes power mower to cut lawns. Trims and edges flower beds, using garden tools. Prunes and clips trees, shrubs and hedges, using manual or power tools. Prepares work reports.

GED: 2 SVP: 2 PA: H 3 4 EC: O DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 4 5 3 4 3 4 4	3 1 9	2 3

7195-150 SPRAYER, HAND (agric.)

Sprays trees, shrubs, flowers and other nursery crops to control pests and plant disease, and to control and promote plant growth:

Measures and mixes pesticides, herbicides, fertilizers, hormones, antibiotics, and fungicides in holding tanks. Turns taps on holding tank to fill portable handsprayers, or attaches hose to holding tank and turns tap to fill tank mounted on truck or tractor. Adjust dials or pumps handpump to bring air pressure in tank and portable sprayers to required level. Attaches hose with specified nozzle to stationary or portable equipment. Adjusts spray nozzle to type of spray required. Drives truck or tractor to haul spray tank to designated area. Holds large hose extending from holding tank on truck or tractor, and directs spray over crops by hand. Carries hand or backpack sprayer, pushes button or lever to activate sprayer, and directs spray over designated area. Inspects crops to ensure adequate spray coverage. Cuts down diseased trees and digs out infested bushes, using power equipment, pick and shovel. Piles diseased or infested trees and bushes for burning. Cleans spray equipment with detergent solution.

GED: 2 SVP: 2 PA: H 3 4 EC: O 6 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 5 3 4 4 4 5	3 1 9	2 3

7195-199 NURSERY AND RELATED WORKERS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with growing and marketing trees, shrubs and ornamental plants, and providing landscaping, groundskeeping and gardening services, and related occupations not presently classified in Unit Group 7195.

7197-FARM-MACHINERY OPERATORS AND CUSTOM OPERATORS

This unit group includes occupations concerned with operating farm machinery such as hop-picking machines, tractors,

cultivators, crop-spraying machines, potato diggers, threshing machines and combines. Activities include: making minor repairs to farm machinery and equipment, and providing planting, cultivating, fertilizing, spraying, harvesting, and other custom-operating services.

7197-110 HOP-PICKING-MACHINE OPERATOR (agric.)

Operates stationary machine to strip hops from vines:

Installs belts, pulleys, drapers (canvas elevators) and drive chains on machine, using hand tools. Assigns workers to unload hop vines from trucks and to feed vines into machine. Operates hand controls to start machine and to adjust speed of blowers and drapers according to weight and moisture content of vines and hops to obtain optimum production. Services machine and makes minor repairs.

GED: 3 SVP: 5 PA: L 2 3 4 EC: I 7 DPT: 6 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 3 4 4 3 4 3 4 5	1 9	2 Y

7197-114 FARM-MACHINERY OPERATOR (agric.)

Operates tractor-drawn or self-propelled farm machinery to plant, cultivate and harvest crops:

Hitches implements to tractor, drives tractor, and operates controls on implements to plough, fertilize, cultivate, spray and harvest crops. Adjusts speed of cutters, blowers and conveyors, depth of digging blades, and height of cutting head of harvesting machine, using hand tools. Services machinery and makes minor repairs.

GED: 3 SVP: 5 PA: H 2 4 8 EC: O 6 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 3 4 4 3 4 3 3 5	1 9	2 Y

7197-118 CROPSPRAYER, MACHINE (agric.)

Operates tractor-drawn equipment to spray and dust tree and ground crops with herbicides, pesticides, hormones and fertilizers to control insect pests, to kill weeds and to fertilize crops:

Mixes spray solutions, fills sprayer tank with solution, and fits spray nozzle, or fills machine hopper with dusting material. Engages tractor power-take-off or starts auxiliary power unit to provide tank air pressure, to operate fans which provide high velocity air movement, and to drive agitator paddles in tank to ensure uniform suspension of spray material within tank. Drives tractor-drawn sprayer or crop duster at rate of speed required to ensure correct application. Monitors spraying and dusting operations, and adjusts machines to control uniformity and rate of application. Adds detergent solution to sprayer tank, and operates pumps to discharge solution through sprayer to clean equipment. Cleans nozzles and nozzle screens with compressed-air hose.

GED: 3 SVP: 4 PA: M 4 8 EC: O 6 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 3 4 4 3 4 3 3 5	1 9	2 Y

7197-199 FARM-MACHINERY OPERATORS AND CUSTOM OPERATORS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with operating and maintaining farm machinery and equipment, and providing custom-operating services, and related occupations not presently classified in Unit Group 7197.

GED: 1 SVP: 2 PA: H 3 4 EC: B DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 5 5 4 4 5 4 4 3 4 5	3 1	2 3

7198-OCCUPATIONS IN LABOURING AND OTHER ELEMENTAL WORK: FARMING, HORTICULTURAL AND ANIMAL HUSBANDRY

This unit group includes occupations in labouring and other elemental work, as described under term title 02-190 LABOURER/ELEMENTAL WORKER (any ind.), concerned with agricultural activities such as: picking fruit; crating eggs; thinning and hoeing row crops; feeding livestock such as cattle, sheep and fur-bearing animals; cleaning and disinfecting stables, poultry houses and brooders; collecting maple syrup; picking and packing earthworms; and preparing products for marketing.

7198-110 LABOURER, EGG-GRADING STATION (agric.)

Performs duties related to handling, washing, grading and packaging eggs:
Marks crates of eggs to identify supplier, and groups each supplier's eggs. Transfers crates of eggs from trolley to work station. Opens crates and deposits flats of eggs onto conveyor of machine which automatically washes, grades and packages eggs into cartons. Removes broken or badly cracked eggs from flat and discards them. Signals egg candler when eggs from each supplier have passed through automatic process. Removes cartons of eggs from output conveyor belt and packs cartons in crates according to grade. Seals and labels crates. Places crates on conveyor leading to storage or truck-loading area. Cleans egg-washing machine with hand brushes and detergent. Refills machine with water and adds detergent. Sweeps receiving and packaging areas.

GED: 1 SVP: 2 PA: M 3 4 EC: I DPT: 6 8 6

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 4 3 4 4 5 5	3 1	2 3

7198-112 FARM LABOURER, GENERAL (agric.)

Assists in planting and harvesting crops, and in the care of livestock, fur-bearing animals and poultry:
Plants seeds in fields or greenhouses and transplants seedlings, by hand or using mechanical aids. Assists in spraying and irrigation operations. Weeds, thins and hoes row crops, and assists in harvesting field and row crops. Picks fruit and nuts from trees, pulls or cuts grapes from vines, and picks berries from plants or bushes. Debeaks chicks and trims their wings. Assists in shearing and docking sheep, branding and castrating livestock, grooming horses, and herding livestock. Feeds and waters livestock, fur-bearing animals and poultry. Cleans stables, pens and enclosures, by hand or using mechanical equipment. Loads and unloads supplies, produce and animals from truck. Assists in erecting, maintaining and repairing buildings and fences.

7198-146 LABOURER, SUGAR-BUSH (agric.)

Performs duties related to production of maple sugar:
Operates power drill or uses hand drill to bore holes in maple trees marked for tapping. Hammers spout into hole. Hangs pail on hook of spout to collect sap. Empties pails of sap into collector tank mounted on wagon or sleigh, and replaces pails on spouts. Drives tractor, snowmobile or horses to convey tank of sap to sugar-house. Opens valve to drain sap from collector tank into main storage tank at sugar-house. Lays out pipes used in vacuum method of sap collection, and uses hand tools to attach hose to storage tank at sugar-house. Attaches pipe to spout on tapped tree, and connects pipe to ground pipe with hand tools to transfer sap to main storage tank at sugar-house. Operates power saw and chops wood for sugar-house stove, and loads wood onto wagon or sleigh. Drives tractor, snowmobile or horses to transport wood to sugar-house. Unloads wood and piles it at sugar-house.

GED: 1 SVP: 2 PA: M 4 EC: O 6 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 5 5 4 4 5 4 4 4 4 4	3 1	2 3

7198-150 WORM PICKER (agric.)

Picks earthworms after dark from grassy areas, such as parks, gardens and golf courses, for sale as fishing bait:
Sprays area with water to cause earthworms to surface. Locates worms, using flashlight, lantern or headlight. Dips thumbs and index fingers in sawdust container attached to leg to dry fingers. Picks worms and deposits them in container attached to other leg. Repeats dipping operation as necessary. Sorts worms according to size, and packages them for shipment or for sale.

GED: 1 SVP: 2 PA: L 3 4 7 EC: O DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 5 5 4 4 5 4 3 3 4 5	3 1	2 3

7198-199 LABOURERS AND OTHER ELEMENTAL WORKERS: FARMING, HORTICULTURAL AND ANIMAL-HUSBANDRY OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with labouring and other elemental work, as described under term title 02-190 LABOURER/ELEMENTAL WORKER (any ind.), in farming, horticulture and animal husbandry, and related occupations not presently classified in Unit Group 7198.

7199-OTHER FARMING, HORTICULTURAL AND ANIMAL-HUSBANDRY OCCUPATIONS, N.E.C.

This unit group includes other occupations, not elsewhere

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classified, concerned with inspecting and grading work as described under term titles, 02-170 INSPECTOR (any ind.) and 02-150 GRADER (any ind.); animal-care occupations; and other farming and horticultural occupations. Inspecting and grading activities include: sexing chickens; candling and grading eggs; tending automatic egg-processing machines; and sorting and packing agricultural produce. Animal-care activities include: caring for animals, birds and marine life in research establishments, pet shops, zoos, pounds, kennels, and aquariums; grooming pets; and assisting in the operation of an apiary. Other farming and horticultural activities include: producing maple syrup; artificial inseminating; pruning trees and shrubs; and irrigating farm land. Occupations concerned with the breeding and raising of fish (fish farming) and shellfish for commercial use are classified in Unit Group 7319, OTHER FISHING, TRAPPING AND RELATED OCCUPATIONS.

Inspecting and Grading Occupations Farming, Horticultural and Animal Husbandry

7199-114 through 7199-122

7199-114 CHICK SEXER (agric.)

Determines sex of baby chicks:

Expose primary wing feathers of chicks and notes length and texture of feathers, or examines genitals of chicks to determine sex. Places chicks in cartons according to sex, and lifts filled cartons onto trolley.

GED: 3 SVP: 3 PA: L 4 7 EC: I 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 3 5 3 3 4 5 4	1 3	2 Y 0

7199-116 EGG-PROCESSING-MACHINE TENDER (agric.)

Tends machine that automatically washes, grades, packages and crates eggs for marketing:

Fills hoppers on wash unit with detergent and anti-foam solution. Arranges for delivery of eggs, cartons, crates and other supplies from stock room. Assigns duties to workers assisting in loading and unloading conveyor belt with eggs. Inserts new expiry date slugs in coding machines on packaging lines. Loads hopper on special packaging line with store coupons. Fills egg carton hoppers on packaging line with open cartons. Pushes button to start machine, and adjusts dial for proper conveyor belt speed to ensure correct processing of eggs. Prepares and submits production records. Inspects machines for malfunctions, and notifies maintenance department when repairs are required.

GED: 2 SVP: 3 PA: L 4 EC: I DPT: 6 6 5

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 4 4 4 4 4 5 4	1 9 3	2 3

7199-118 EGG CANDLER (agric.)

Inspects eggs to determine quality and fitness for human consumption: Inspects eggs carried on conveyor over light in darkened candling station. Picks out and discards cracked, dirty or unsaleable eggs. Actuates counter to record number of eggs discarded. Notes shell texture and internal characteristics, such as blood and meat spots and size and position of yolk and air cell, to determine quality of eggs. Picks out lower quality eggs, and packages them in cartons according to grade. Actuates counter to record number of cartons completed. Actuates switches to stop or slow down conveyor as necessary. Signals other workers when shipment has been candled.

GED: 2 SVP: 3 PA: L 4 7 EC: I DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 3 4 3 4 4 5 4	1 3	2 0 Y

7199-122 SORTER AND PACKER, AGRICULTURAL PRODUCE (agric.)

Sorts and packs agricultural produce such as fruits and vegetables: Sorts produce on conveyor belt or table according to grade, colour and size, and places sorted produce in containers or on conveyors. Discards inferior produce and foreign matter. Bunches, ties and trims produce. Packs produce in crates, boxes, baskets and cartons for storage or shipment.

GED: 2 SVP: 2 PA: L 4 EC: I DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 4 5 3 4 3 5 3	3 1	2 3 Y

Animal Care Occupations 7199-142 through 7199-162

7199-142 ANIMAL ATTENDANT, POUND (agric.)

Feeds, waters and cares for animals in pound: Records breed, size, colour and sex of animals. Attaches chain with identification data around neck of animals. Checks dog-licence tag and notifies owner of dog's presence. Examines animals to detect injury or illness, and refers cases to qualified staff for treatment. Feeds and waters animals. Cleans and disinfects kennels and enclosures. Sells unclaimed animals after specified waiting period. Destroys seriously injured, sick and unclaimed animals after specified waiting period. Answers telephone queries.

GED: 3 SVP: 6 PA: M 3 4 EC: I 6 DPT: 3 7 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 4 4 4 4 4 4 5 4	3	4 0 1

7199-144 PET GROOMER (agric.)

Grooms dogs, cats and other pets:

Schedules appointments and records pet's name, sex, age, size, disposition, and medical history. Discusses grooming style with owner of pet. Secures pet with harness, if necessary, and administers sedative with owner's consent to calm nervous pet. Clips, shears and grooms pet, using clippers, shears, scissors, combs and brushes. Cleans pet's ears and anal glands with cotton swabs. Trims pet's claws. Bathes pet, and rubs pet's coat with towel to remove excess moisture. Blow-dries and brushes pet's coat to obtain fluffy effect. Sprays pet to destroy insect pests. Applies medication to minor injuries, and recommends treatment by veterinarian when needed.

GED: 3 SVP: 5 PA: M 3 4 EC: I 4 6 7 DPT: 6 7 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 4 <u>3</u> 4 <u>3</u> 4 <u>4</u> 4 4	1 2	1 9

7199-145 APIARY WORKER (agric.)

Assists in operation of an apiary:

Constructs and repairs beehives. Drives vehicle to transport beehives and honeycombs filled with bees to fields. Operates pressurized hand-sprayer to treat beehives with disinfecting solution. Inserts honeycombs into hives. Inspects bees for disease and checks honeycombs for honey content, using smokepot to calm bees to allow for inspection. Mixes drugs, and operates pressurized handsprayer to spray bee colonies to prevent disease. Forces bees from hives, using chemicals, escape board or forced-air blower, and removes honeycombs. Removes honey from honeycombs, using centrifugal extractor. Turns spigot on extractor to fill containers with honey. Makes minor repairs to sprayers and other equipment.

GED: 3 SVP: 5 PA: M 4 EC: B 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 4 <u>3</u> 5 <u>3</u> 4 <u>4</u> 4 4	1 9	1 Y

7199-146 AQUARIST (agric.; amuse. & rec.)

Attends to fish and other marine life in aquarium:

Prepares specified feed, food supplements, vitamins and special diets. Feeds fish and other marine life at scheduled intervals. Cleans bottom of aquarium, using hand-operated siphon. Brushes and scrapes algae from windows of aquarium. Embeds marine plants and decorations in sand-bed on bottom of aquarium to provide decorative effects. Takes water samples periodically for laboratory analysis. Changes water temperature and adds chemicals to change acid content and other properties of water to provide different environment for different species. Starts aerator to maintain oxygen content of water at specified level. Reports diseased, injured or dead fish or other marine life to superior. Administers medical treatment as directed by superior. Relieves cashier at ticket counter and performs routine clerical duties.

GED: 3 SVP: 4 PA: L 4 EC: I DPT: 6 7 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 4 <u>3</u> 4 <u>4</u> 4 <u>4</u> 5 4	3 1	0 2

7199-150 ANIMAL ATTENDANT, LABORATORY (agric.)

Attends to animals used in experimental, medical and biological tests and research in laboratory:

Orders feed and supplies. Weighs, measures, grinds and mixes feed. Feeds and waters animals. Adjusts temperature and humidity controls to regulate environment of animals' living quarters. Transfers animals from pens and cages to holding areas. Cleans and disinfects pens and surrounding areas, and cleans and sterilizes cages. Transfers animals from holding areas back to pens and cages. Operates sterilizing unit to decontaminate wastes. Discards wastes in disposal unit. Cleans and disinfects quarantine and isolation units after use. Sprays insecticides and spreads powder in pens, cages and surrounding areas to control insect pests. Examines animals to detect illness, and reports signs of illness to superior. Separates weaned animals from mothers. Records genealogy, weight, diet and other data. Helps technical personnel to collect urine and blood specimens from animals, to take and record animals' temperature, and to perform other related duties, if required.

GED: 3 SVP: 4 PA: L 3 4 EC: I 6 DPT: 6 7 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 4 <u>4</u> 4 <u>4</u> <u>4</u> 5 4	3 1	0 1 2

7199-154 KENNEL ATTENDANT (agric.)

Feeds, waters and cares for dogs, cats and other animals in kennel: Cleans and disinfects pens and enclosures. Spreads fresh straw, paper, sawdust or other bedding. Washes and grooms animals, and trims their claws. Mixes specified feeds and fills feed and water containers. Reports illnesses or injuries to superior, or calls veterinarian. Treats minor illnesses and injuries. Bathes animals, and sprays and dusts them with insecticides to control insect pests. Adjusts temperature of indoor kennels to maintain desired level. Assists in exercising animals.

GED: 2 SVP: 3 PA: M 3 4 EC: B 6 DPT: 6 7 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 <u>4</u> 5 <u>4</u> 4 <u>4</u> 5 4	3 1	3 1

7199-158 ANIMAL ATTENDANT, ZOO (agric; amuse. & rec.)

Feeds, waters and cares for animals and birds in zoo or similar establishment:

Observes animals and birds, listens for their distress calls, and handles them to detect illness or injury. Assists veterinarian and other workers to inoculate and treat sick and injured animals and birds. Makes minor repairs to cages and holding areas, and assists other workers with major repairs. Maintains tools and equipment in good repair. Cleans and disinfects cages and holding areas. Unloads feed for animals and birds from delivery trucks. Feeds specified rations to animals and birds, and fills water containers. Reports dietary problems of animals and birds to superior. Assists other workers to restrain, crate and uncrate arriving or departing animals. Leads or carries animals, or opens and closes doors between cages to transfer animals from one enclosure to another. Cares for animals in quarantine and ensures that quarantine regulations are observed. Dusts, sprays or immerses animals and birds in bath to control insect pests. Bathes and grooms animals to maintain hygiene, comfort and appearance. Answers visitors' questions, and cautions people taking risks in dangerous areas. Records pertinent data on animals and birds, and reports data to superior.

MAJOR GROUP 71

GED: 2 SVP: 3 PA: H 3 4 EC: B 6 7 DPT: 6 7 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 4 4 4 4 4 4 5	3 1	3 1

7199-162 ATTENDANT, PET SHOP (agric.; ret. trade)

Cares for and sells animals, birds and fish in pet shop: Feeds and waters dogs, hamsters, guinea pigs and other animals. Feeds fish, and starts aerator to maintain oxygen content in aquarium at prescribed level. Feeds and waters canaries, parrots and other birds. Transfers birds and animals from one enclosure to another, cleans and disinfects enclosures, and transfers birds and animals to original location. Removes fish from aquariums with net, and places them in holding tanks. Empties and cleans aquariums, refills them with water, and places plants and accessories on bottom of aquariums. Transfers fish from holding tanks back to aquariums. Examines pets for injuries or illness, and reports findings to superior. Sells pets, pet supplies, accessories and literature to customers, and provides customers with information on care of pets. Removes pet selected by customer, and places pet in suitable carrying container. Displays pets at exhibitions and shows for advertising purposes.

GED: 2 SVP: 3 PA: L 4 5 EC: I DPT: 6 7 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 4 4 4 4 4 5 4	3	3 1

Other Farming and Horticultural Occupations

7199-182 through 7199-199

7199-182 MAPLE-SYRUP MAKER (agric.)

Tends equipment to produce maple syrup from sap of sugar-maple trees: Stocks sugar-house with wood supply for stove, or arranges for delivery of other fuel. Regulates pump or gravity system to transfer sap through pipes from trees to storage tank in sugar-house. Cleans and assembles evaporator pans, and places pans on stove. Connects hose from sap-storage tank to evaporator pans. Opens valve of sap-storage tank to transfer sap through compartments of evaporator pans on stove. Adjusts stove controls to regulate heat. Opens valve to transfer syrup to finishing pans when sufficient evaporation has occurred. Observes colour of syrup and tests syrup with special thermometer to ensure syrup meets prescribed standards. Opens valve at end of finishing pans to drain syrup through filter into containers. Fills, caps and labels containers. Disassembles, cleans and stores sugar-house equipment at end of season. Sells maple syrup to customers on premises.

GED: 3 SVP: 6 PA: M 3 4 EC: I 3 6 DPT: 6 8 5

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 4 4 4 4 4 4 4	9 1	0 Y

7199-184 ARTIFICIAL-BREEDING WORKER (agric.)

Collects and packages bull semen used for artificial breeding of cows: Fastens rubber sheath with attached semen collector to genital organ of tethered bull. Brings cow close to bull, and stimulates bull's organ to cause ejaculation. Examines semen through microscope to determine density and mobility of gametes. Dilutes semen with prescribed diluents according to formulas. Transfers required amount of semen to vial, using titration tube. Attaches label to vial indicating date of collection, source, quality and concentration of semen, and records data on file cards. Packs vials of semen in ice or liquid nitrogen for freezing and storage or shipment. Inseminates cows artificially, if required.

GED: 3 SVP: 4 PA: L 4 7 EC: I 6 DPT: 3 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 3 3 4 4 3 4 4 4	9 1	Y 0

7199-186 TREE PRUNER (agric.)

Prunes dead, broken, or excess branches from trees and shrubs: Climbs ladder, stands on hydraulic lift of truck, or climbs tree to gain access to upper branches. Prunes trees and shrubs to enhance their appearance, or to preserve or improve quality of fruit, using pruning hooks, shears, clippers and power pruners. Applies tar or other protective substance to cut surfaces of trees or shrubs to protect them from insects, disease, rot, or loss of sap. Cuts down diseased and undesirable trees and shrubs, using hand tools or power-operated equipment. Cuts felled trees, using hand tools or power-operated equipment, and loads pieces into truck for disposal. Chips and digs out roots, using hand tools and power-operated equipment.

GED: 3 SVP: 4 PA: H 2 3 4 EC: O 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 4 4 5 4 4 3 3 5	6 9 1	Y 0

7199-188 ARTIFICIAL INSEMINATOR (agric.)

Inseminates cows with prepared bull semen: Refers to breeding chart and to specifications of farmer, and selects appropriate semen specimen from chilled storage container. Draws required amount of semen into breeding syringe. Cleans cow's vulva with soap, water and antiseptic solution. Inserts nozzle of syringe into cow's vagina, and depresses syringe plunger to inject semen. Records specimen used and cow bred.

GED: 3 SVP: 3 PA: L 4 EC: I 6 7 DPT: 3 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 4 4 4 4 4 5	1 3 9	2 Y

7199-190 IRRIGATION WORKER (agric.)

Installs and maintains ditch irrigation system, portable sprinkler system, or wheel-line system to irrigate row and field crops: Lifts gate or opens valves to admit water to field-border ditches or ditches which follow land contours. Observes flow of water through

ditches, and removes obstructions, deepens trenches, and shovels earth into low spots of embankment. Observes flow of water through wooden tunnels and siphons to ensure adequate flow from main perimeter ditch to individual rows. Cleans clogged tunnels and siphons. Lays lengths of piping along field, connects sections together, and attaches upright revolving sprinklers to complete portable sprinkler system, using hand tools. Positions wheels of wheel-line system, runs piping through hubs, connects pipe lengths together, fits rotating sprinklers, and connects system to water supply, using hand tools. Turns valve to admit water to rotating sprinklers of wheel-line system, monitors operation, clears foreign matter from sprinkler heads and replaces heads, using hand tools. Disassembles, moves and reassembles portable system when soil has been sufficiently irrigated, or starts gasoline engine to supply power to move wheel-line system.

GED: 2 SVP: 3 PA: M 3 4 EC: O DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 4 5 4 4 5	1 3 9	2 3 Y

**7199-199 MISCELLANEOUS FARMING,
HORTICULTURAL AND ANIMAL-HUSBANDRY
OCCUPATIONS**

This group includes miscellaneous farming, horticultural and animal-husbandry occupations, and related occupations not presently classified in Unit Group 7199.

FISHING, TRAPPING AND RELATED OCCUPATIONS

This major group includes occupations concerned with harvesting fish and other aquatic life from deep sea, coastal and inland waters; breeding and tagging fish; growing oysters; tending lobster pounds; killing seals; and trapping wild animals. These occupations are classified in the following minor group:

731 Fishing, Trapping and Related Occupations

731 – FISHING, TRAPPING AND RELATED OCCUPATIONS

This minor group includes occupations concerned with fishing in coastal, inland or deep sea waters, using nets or lines; harvesting shellfish in open water or growing and harvesting them in shallow water; killing seals; gathering seaweed; breeding and tagging fish in a hatchery; tending lobster pounds; growing oysters; repairing nets; and trapping wild animals. These occupations are classified in the following unit groups:

- 7311 Captains and Other Officers, Fishing Vessels**
- 7313 Net, Trap and Line Fishing Occupations**
- 7315 Trapping and Related Occupations**
- 7319 Other Fishing, Trapping and Related Occupations**

7311-CAPTAINS AND OTHER OFFICERS, FISHING VESSELS

This unit group includes occupations concerned with commanding the crew of a fishing vessel, and with supervising and co-ordinating activities of workers engaged in harvesting fish and other aquatic life.

7311-110 CAPTAIN, FISHING VESSEL (fishing)

Commands fishing vessel to search for and catch fish or other marine life:

Interviews and hires or recommends hiring of crew members. Assigns crew to watches and quarters. Plots courses and computes positions, using compass, clock and navigation charts and tables. Steers vessel, and operates radio, radar, sonar, echo sounder and other electronic navigation and fishing aids. Directs fishing operations, employing knowledge of fish, fishing grounds, seasons and capabilities of vessel and crew. Records daily activities in ship's log. Conducts daily inspections to ensure that vessel and gear are properly maintained and equipped. Purchases supplies and equipment. Assists crew in fishing operations, if required.

GED: 4 SVP: 8 PA: M 2 4 5 6 7 EC: B 4 6 DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>3</u> <u>2</u> <u>3</u> <u>4</u> <u>3</u> <u>4</u> <u>3</u> <u>3</u> <u>4</u>	5 9	4 5 0 Y

7311-114 MATE, FISHING VESSEL (fishing)

Supervises and co-ordinates activities of crew members aboard fishing vessel:

Directs activities of workers engaged in catching, cleaning, preserving, stowing and refrigerating fish and other marine life. Examines fishing gear and boat equipment, and directs crew members to repair or replace defective items. Stands watch during specified periods. Computes geographical position and plots course of vessel at request of captain, using navigation aids such as compass, radar, loran, sextant, tables and charts. Operates winch or other equipment to lower and raise net. Supervises the loading, unloading and storage of supplies, equipment and fish catch. Assumes duties of 7311-110 CAPTAIN, FISHING VESSEL (fishing) on relief basis.

GED: 4 SVP: 7 PA: M 2 4 5 6 7 EC: B 4 6 DPT: 1 3 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>3</u> <u>3</u> <u>3</u> <u>4</u> <u>3</u> <u>4</u> <u>3</u> <u>3</u> <u>4</u>	5 9	4 5 0 Y

7311-118 BOATSWAIN, FISHING VESSEL (fishing)

Supervises and co-ordinates deck activities of crew members aboard fishing vessel:

Directs workers engaged in baiting lines, laying nets, preparing fishing tackle, removing fish from lines or nets, and stowing catch in hold. Examines fishing gear and other equipment to ensure safe and efficient operation. Directs crew in maintenance and repair of vessel and gear. Operates winches and performs duties of crew, if required. Assumes duties of 7311-114 MATE, FISHING VESSEL (fishing) on relief basis.

GED: 3 SVP: 6 PA: H 2 3 4 5 6 EC: O 4 6 DPT: 1 3 4

MAJOR GROUP 73

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 3 4 3 3 4 4 4 3 3 4	9	4 1 Y

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 3 3 5 3 4 3 4 5	9 1	0 Y

7311-199 OFFICERS, FISHING VESSELS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with commanding the crew of a fishing vessel and with supervising and co-ordinating activities of workers engaged in harvesting fish and other aquatic life, and related occupations not presently classified in Unit Group 7311.

7313-NET, TRAP AND LINE FISHING OCCUPATIONS

This unit group includes occupations concerned with catching fish, using nets, traps, lines, pots or harpoons, and with gathering shellfish, using traps, pots, dredges or hydraulic harvesters.

7313-110 TRAP BOSS (fishing)

Supervises, co-ordinates and performs activities of fishermen/women engaged in setting and emptying trap nets (Unit Group 7313): Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.). Determines patterns in which traps are to be set, using knowledge of weather, water conditions and fish habits. Determines when traps are to be emptied, using knowledge of temperatures and rates of fish decay. Supervises workers engaged in rigging pile-driven fish traps, if required. Performs duties of workers supervised, 7313-134 FISHERMAN/WOMAN, TRAP (fishing).

GED: 4 SVP: 6 PA: M 5 6 EC: O 4 6 DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 3 4 3 4 4 4 4 4 4 4	1 9	4 5 0

7313-114 SHELLFISH-HARVESTER OPERATOR (fishing)

Sets up and operates hydraulic shellfish harvester on board boat to harvest shellfish from sea floor: Attaches water pressure hoses and lifting and towing cables to harvester, using hand tools. Adjusts angles of escalator shear or dredge and water jets according to species of shellfish sought and nature of sea bottom encountered. Operates hoisting boom and winch to lower harvester into water. Starts pumps that force water through jets to loosen sea bottom to facilitate harvesting operation. Starts escalator belt or hoists dredge from water to dump shellfish onto boat deck. Inspects shellfish periodically to determine depth of cut of escalator shear or dredge blades, and turns valves to adjust water pressure according to firmness of bottom encountered. Sorts and packs shellfish. Cleans dredge blades, escalator shear and water jets. Maintains and repairs harvesting machinery and boat, using hand and power tools. Unloads shellfish at dock. Prepares operating reports, if required.

GED: 3 SVP: 5 PA: M 2 3 4 8 EC: O 4 DPT: 6 8 2

7313-116 FISHERMAN/WOMAN, DANISH SEINE (fishing)

Catches fish with Danish seine (long net so constructed that sides can be pulled together to close mouth of net), working as crew member of fishing vessel:

Attaches lead weight and one end of seine to buoy, using clamps and hooks, and attaches additional sections of net as needed. Throws weighted buoy overboard, and pays out net by hand with assistance of other crew members. Observes angle of warps (ropes attaching net to vessel) to determine when net has reached sea bottom, and signals verbally or by hand to stop vessel. Operates power or manual winch to close mouth of net to prevent fish from escaping, and to pull buoy and full net aboard. Stops and starts winch periodically to pour catch from net into holding bins on deck of vessel, to detach and stack net sections and to detach and coil individual lengths of warps, assisted by other crew members. Repairs seine and assists other crew members in operation and maintenance of vessel. Sorts, cleans and stows catch in hold. Unloads catch at dock, if required.

GED: 2 SVP: 5 PA: H 2 3 4 EC: O 4 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 4 5 3 3 4 4 4	9 3 1	2 3

7313-118 FISHERMAN/WOMAN, PURSE SEINE (fishing)

Catches fish with purse seine (net so constructed that bottom can be pulled together like purse strings), working as crew member of fishing vessel:

Operates skiff to hold end of seine in place while mother ship pays out net in circle to surround school of fish, or pays out net from one of two skiffs while circling school of fish and hooks ends of net together when boats meet. Hooks seine to mother ship, attaches rope to winch and operates winch to close bottom of seine to prevent fish from escaping and to draw net to vessel. Lowers brail (dip net), or suction hose from hydraulic pump into seine to lift fish onto boat. Sorts, cleans and stows catch in hold. Repairs purse seine and assists other crew members in operation and maintenance of vessel. Operates skiff to hold net away from ship during pursing and emptying operations.

GED: 2 SVP: 4 PA: H 2 3 4 EC: O 4 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 3 3 5 3 4 3 4 4	9 3 1	2

7313-122 DECKHAND, FISHING VESSEL (fishing)

Catches fish or other marine life and operates and maintains fishing vessel, working as crew member:

Prepares nets, lines and other fishing tackle. Trolls, anchors lines or lays trawl nets to catch fish. Sorts, cleans and salts or packs fish in ice, and stows catch in hold. Hoses down decks. Mends nets, replaces lines and maintains winches, booms and other equipment. Stands watch,

steers vessel and handles ropes during mooring. Loads gear and supplies onto vessel by hand or using wheeled trolley, and stows in designated areas. Operates life-saving and fire-fighting equipment, if required.

GED: 2 SVP: 4 PA: H 2 3 4 EC: O 4 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 <u>3</u> 5 <u>4</u> 4 <u>3</u> 4 4	3 1	2 3

7313-126 FISHERMAN/WOMAN, GILL NET (fishing)

Catches fish with gill nets, working alone or as crew member of fishing vessel:

Attaches floats, weights, poles, ropes and cables to net, using wire and hand tools. Ties nets together to form fleet of nets and attaches anchor and buoy at each end. Lowers nets into water by hand or using winch, and anchors them in position. Hauls nets to boat by hand or using winch, and removes fish from nets by hand. Sorts and packs fish in ice and stows in hold or boxes. Cleans fish before packing, if required. Assembles and repairs nets, using knife, net needle and twine. Operates or assists crew members to operate vessel to and from fishing grounds. Maintains or assists crew members to maintain vessel and fishing gear. Locates schools of fish or determines nature of sea bottom, if required, using electronic devices such as echo sounder. Cuts holes in ice and sets net to catch fish in winter, if required, using prairie jigger to stretch net under ice between holes.

GED: 2 SVP: 4 PA: H 2 3 4 EC: O 4 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 <u>3</u> 5 <u>3</u> <u>4</u> <u>3</u> 4 4	9 3 1	2 3

7313-130 FISHERMAN/WOMAN, SWORDFISH (fishing)

Catches swordfish, using hand-thrown harpoon or hooks attached to lines, working alone or as crew member of fishing vessel:

Spears swordfish from platform on vessel, using harpoon attached to buoy, or lays out lines and attaches hooks, bait and sinkers, and trolls to catch swordfish. Pulls fish to boat by hand, and hoists fish from water into vessel, using block and tackle or winch. Operates and maintains or assists crew members to operate and maintain vessel and gear. Uses special equipment, such as water temperature gauges and depth sounders, to locate fish. Cleans and stows fish in hold. Unloads catch at dock.

GED: 2 SVP: 4 PA: VH 2 3 4 EC: O 4 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 <u>3</u> 4 5 <u>4</u> 4 <u>3</u> 4 4	9 3 1	2 3

7313-134 FISHERMAN/WOMAN, TRAP (fishing)

Catches fish with stationary and floating traps, working as crew member of fishing vessel:

Attaches end of leader (long piece of netting to guide fish into trap) to rock on shore or weighted buoy. Ties anchors to anchor ropes on corners of trap. Attaches netting to anchors and guy lines to form walls, top and bottom of trap. Sets trap in water, using stakes, piles,

guy lines, anchors, floats, weights and buoys to shape and hold trap in place. Raises trap from water, using block and tackle or winch. Pulls purse lines at corners of trap to open trap, and scoops fish into boat by hand or using shovel. Sorts, grades, cleans and packs fish in salt or ice. Unloads fish at dock. Constructs, repairs and modifies traps. Construct weirs (traps made with stakes, brush and netting), if required.

GED: 2 SVP: 4 PA: VH 2 3 4 EC: O 4 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 <u>3</u> 4 5 <u>3</u> <u>3</u> <u>3</u> 4 5	9 3 1	2 3

7313-138 FISHERMAN/WOMAN, TRAWL NET (fishing)

Catches fish and other marine life with trawl net (funnel-shaped net dragged at varying depths between bottom and surface of sea or lake), working as crew member of fishing vessel:

Attaches wood or metal beam and runners to mouth of net or an otter board to each side of net's mouth to hold it open during towing. Fastens trawl warps (towing cables) to net and casts net overboard. Operates winch to pull net on board, and releases catch from end of net into pens or boxes. Sorts catch, packs in ice and stows in hold. Cleans fish before packing, if required. Assists other crew members in operation and maintenance of vessel. Loads and unloads supplies and fish, if required.

GED: 2 SVP: 4 PA: VH 2 3 4 EC: O 4 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 <u>3</u> 5 <u>3</u> 4 <u>3</u> 4 4	9 3 1	2 3

7313-142 FISHERMAN/WOMAN, HOOP NET (fishing)

Catches fish beneath ice with hoop net (cylindrical-net trap made of twine or wire mesh which is held in shape by series of hoops of decreasing size), working alone or as member of two-person team:

Covers hoops within trap with netting to trap fish. Cuts holes in ice, using needle bar, power auger or power chain saw. Lowers prairie jigger through ice to propel line from one hole to another. Attaches net to line and pulls back to first hole to position trap under ice. Hammers stakes into ice and attaches weights and lines to stakes and trap to anchor trap in position. Pulls trap from water by hand and dumps catch into hold or boxes. Operates boat and maintains fishing gear, equipment and vessel. Cleans catch, if required. Operates echo sounder or other fish-finding devices, if required.

GED: 2 SVP: 3 PA: H 2 3 4 EC: O 4 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 4 5 <u>3</u> 4 <u>3</u> 4 4	9 3 1	2 3

7313-146 FISHERMAN/WOMAN, LINE (fishing)

Catches fish with hook and line, working alone or as crew member of fishing vessel:

Lays out lines and attaches hooks, bait, sinkers and various anchors, floats and swivels, depending on type of fish sought. Puts line in water and holds by hand or anchors line to bottom and attaches buoy or marker float. Hauls line onto deck by hand or using reel or winch, and

MAJOR GROUP 73

removes catch. Sorts and packs fish in ice, and stows in hold or in boxes. Hoses down deck. Operates vessel or assists crew members in operation of vessel. Maintains or assists crew members to maintain vessel and gear. Catches bait if required, using beach or bar seine. Hauls fish from water with gaff, and stuns fish with club. Cleans fish before packing, if required.

GED: 2 SVP: 3 PA: H 2 3 4 EC: O 4 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 5 <u>3</u> 4 4 4 4	9 3 1	2 3

7313-150 FISHERMAN/WOMAN, POT (fishing)

Catches black cod fish and shellfish such as crabs, lobsters, prawns and shrimp, using pots (cages with funnel-shaped net openings), working alone or as crew member of fishing vessel:

Fastens bait inside pots. Places weights inside lobster pots and attaches buoy line, or ties crab pots to weighted fleet lines and ties fleet lines to buoy line at both ends. Attaches buoy line to inflatable buoy and lowers pots and lines into water. Secures buoy with hooked pole and pulls up pots by hand or using winch. Reaches through hinged door of lobster pot or pulls slip knot at base of crab pot to remove catch. Measures catch with fixed gauge to ensure catch is of legal size, and tosses illegal catch overboard. Packs catch in boxes, covers with ice or kelp, and places in shade or covers with canvas. Operates vessel or assists crew members in operation of vessel. Maintains or assists crew members to maintain vessel and gear. Unloads catch at dock by hand or using winch. Inserts peg in hinge of claws to prevent lobsters from damaging each other. Places lobsters in water tanks when on board vessel or in lobster pounds at shore, if required. Makes or repairs pots. Sells catch to public at dock, if required.

GED: 2 SVP: 3 PA: VH 2 3 4 EC: O 4 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 5 <u>4</u> 4 4 4 4	9 3 1	2 3

7313-154 SHELLFISH-BED ATTENDANT (fishing)

Cultivates and harvests shellfish:

Loads marking stakes on boat or barge and steers or poles vessel to shellfish bed. Hammers stakes into mud to mark borders of shellfish enclosure. Sows spat (baby shellfish) in enclosure, using shovel or pump to scatter it. Pours quicklime on starfish to protect oysters. Walks on beach at low tide and gathers shellfish from wild or cultivated bed, by hand or using shovel, fork or rake. Treads in water and feels for shellfish with bare feet. Operates powerboat which tows cleaning drag to pull shellfish from mud. Opens and closes rake-tongs to grope for shellfish from boat. Sorts catch and packs in ice. Shovels loose shellfish from boat at processing plant or conditioning bed. Sells catch to public at dock, if required.

GED: 2 SVP: 3 PA: M 2 3 4 EC: O 4 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 5 <u>4</u> 4 <u>3</u> 4 4	9 3 1	2 3

7313-158 SHELLFISH-HARVESTER DECKHAND (fishing)

Cleans, sorts and packs shellfish on board boat equipped with hydraulic shellfish harvester:

Removes shellfish from conveyor or from pile on deck. Cleans shellfish of trash such as shells, stones and seaweed. Deposits shellfish in containers on deck. Dumps containers onto worktable and sorts shellfish according to species. Deposits shellfish in containers for shipping, and packs in ice or kelp. Stamps number identifying ship or owner on container and places container in hold of vessel. Assists operator to adjust and repair harvesting and conveying equipment, using hand tools. Shucks shellfish if required. Stands watch and assists in operation and maintenance of vessel, if required.

GED: 2 SVP: 3 PA: H 2 3 4 EC: O 4 DPT: 6 8 6

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 5 <u>3</u> 4 4 4 5	9 3 1	2 3

7313-162 FISHERMAN/WOMAN, TROLLER (fishing)

Catches fish with trolling lines attached to fishing vessel, working alone or as crew member:

Lays out lines and attaches hooks, bait, sinkers and various anchors, floats and swivels, depending on type of fish sought. Ties lines to poles extending from sides of vessel. Operates power winch to lower lines into water. Operates vessel to troll fish lines. Listens for bell on end of pole to indicate fish has been caught, and operates power winch to pull in line. Hauls fish from water using gaff (long pole with large curved hook at end), if required. Clubs fish to stun it, if necessary, and removes catch from lines by hand. Sorts and cleans fish if required, and packs in ice and stows in hold or boxes. Hoses down deck. Steers vessel and stands watch. Maintains vessel and fishing gear.

GED: 2 SVP: 3 PA: H 2 3 4 EC: O 4 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 5 <u>3</u> 4 <u>4</u> 4 4	9 3 1	2 3

7313-199 NET, TRAP AND LINE FISHING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with catching fish and harvesting or gathering shellfish, and related occupations not presently classified in Unit Group 7313.

7315-TRAPPING AND RELATED OCCUPATIONS

This unit group includes occupations concerned with trapping wild animals for pelts.

7315-110 TRAPPER (hunt. & trap.)

Traps animals for pelts:

Sets steel traps or snares with bait, scent or camouflage. Positions traps in patterns according to size, habits and environment of animals sought. Operates snowmobile or travels on foot, snowshoes or skis to patrol trapline. Removes catch and resets or relocates traps or snares.

Kills trapped animals, and carries them on back or operates snowmobile or truck to transport them from trapping area, or arranges for their transportation by air. Skins animals, using knife, and stretches pelts on frames for curing. Scrapes or skives skin side of pelts with knife and scraper to remove fat and flesh. Washes and brushes fur to enhance its appearance. Packs pelts for shipping to fur auction or buyer. Negotiates with buyers for price of pelts, if required. Maintains and repairs traps, equipment and machines.

GED: 3 SVP: 5 PA: H 3 4 7 EC: O 6 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 4 3 5 4 4 3 4 4	1 9	6 9 Y

7315-199 TRAPPING AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with trapping wild animals, and related occupations not presently classified in Unit Group 7315.

7319-OTHER FISHING, TRAPPING AND RELATED OCCUPATIONS

This unit group includes other occupations concerned with killing seals, gathering or harvesting seaweed, breeding, raising and tagging fish, repairing nets, growing oysters, tending lobster pounds, and other fishing, trapping and related occupations.

7319-110 OYSTER GROWER (fishing)

Plants, cultivates and harvests oysters:

Selects rearing and maturing beds for sowing and cultivating oysters according to soil, water and weather conditions, supply of natural food and relative freedom from predators. Gathers and deposits bedding oysters in selected area by hand or using boat and dredging device. Immerses shells or cemented rings in water while oysters are spawning to gather spat (oyster seed). Separates spat from shells or rings, using pointed hammer or iron. Scatters spat over rearing beds, using shovel or pump. Pours quicklime on starfish to protect oysters during growth, or mops starfish from water, using boat equipped with mopping attachment. Observes oyster growth and transfers maturing oysters to other beds. Harvests oysters, using dredge. Cleans, grades and packs oysters in containers. Loads containers on truck and transports oysters to commercial establishment. Prepares records on operations. Maintains and repairs boats and equipment.

GED: 3 SVP: 5 PA: H 3 4 EC: O 4 DPT: 3 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 3 4 4 3 4 4 4 3 4 4	9 1	4 1 9

7319-114 FISH-HATCHERY TECHNICIAN (fishing)

Performs technical functions related to spawning, breeding, incubating and raising fish in fish hatchery, and supervises activities of assistants:

Assists workers with netting, handling and tagging of adult fish from streams, lakes, ponds or hatchery collection area. Sorts adult fish for breeding according to species, size and condition. Takes scale sample from each fish to provide data for selective breeding programs. Records weight, length and sex of fish, tag number, and evidence of disease or injury. Strokes abdomen of fish to strip eggs from female and milt from male for artificial fertilization. Places eggs and milt in fertilizing pan partially filled with water, and stirs water by hand to fertilize eggs. Transfers fertilized eggs to incubating pans to develop into fry. Sorts fry according to species and size, and transfers them to rearing ponds. Conducts chemical tests of water in incubating tanks or rearing ponds, and adjusts valves to control condition and volume of water. Supervises workers engaged in grading and culling young fish to prevent overcrowding in rearing ponds. Adjusts automatic fish feeders to dispense food. Examines eggs and fish and observes fish behaviour to detect disease. Prepares medicinal substances and adds to water or food to treat diseased fish. Counts and records mortality rate of fish in rearing ponds, and reports abnormally high death rates or unusual behaviour of fish. Supervises and demonstrates proper techniques to seasonal workers engaged in marking, tagging, anaesthetizing and fin-clipping of young fish prior to release. Records and tabulates biological data of young fish prior to release. Experiments with selected groups of fish to determine and record data on optimum feeding, disease treatment and handling procedures, if required. Modifies and improves hatchery equipment, if required.

GED: 4 SVP: 7 PA: M 3 4 5 6 7 EC: B 4 DPT: 3 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 3 3 4 3 4 3 4 3 5 3	9 7 1	9 0 Y 1

7319-122 NET REPAIRER (fishing)

Assembles and repairs fish nets, traps and pots on shore or on board fishing vessel:

Assembles, ties, splices and adjusts various webbing materials, floats, buoys, weights, rings and ropes to make and shape gill nets, seines, trap nets, pots, dredges and trawls, using knife and net needle (bobbin shuttle filled with twine or polypropylene cord). Reassembles broken sections of nets or repairs holes and tears in webbing, using knife and net needle.

GED: 2 SVP: 5 PA: H 3 4 7 EC: B 4 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 3 4 5 3 3 3 5 5	3 1	2 3 Y

7319-126 SEAWEED-HARVESTING-MACHINE OPERATOR (fishing)

Operates boat equipped with mechanical harvesters to harvest seaweed, working alone or as crew member:

Operates power winch to lower mechanical harvesting mowers and rakes to sea floor. Operates boat to tow harvesters to cut and collect seaweed. Raises harvesters to boat and dumps contents onto deck. Removes sand, stone, shells and foreign matter from seaweed by hand. Distributes seaweed in hold, using pitchfork or winch. Unloads

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seaweed from boat at dock, using pitchfork or winch. Sells seaweed to agent of processing plant at dock, if required. Loads seaweed into truck, tractor or wagon, using power winch, and drives to processing plant, if required.

GED: 2 SVP: 4 PA: M 2 3 4 7 8 EC: O 4 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 4 5 <u>3</u> 4 <u>3</u> 3 4	3 1 9	2 Y

7319-132 FISH-FARM WORKER (fishing)

Patrols commercial fish-rearing establishment to check conditions in rearing enclosures, reports irregularities, and assists in care of live fish: Patrols buildings, fish-rearing enclosures and grounds to detect and report irregularities, such as abnormal number of fish mortalities, blocked water screens, or fire and security hazards. Cleans water screens to prevent overflowing and to restore water level in enclosure to specified depth, using scraper and brush. Turns valves and controls pumps to backwash and flush filtered residue from water filters. Scatters measured amount of food on surface of water in fish enclosures. Reads and records temperatures of water in enclosures at regular intervals, and notifies other workers when temperatures are not within specified tolerance. Repairs nets and other devices used to hold fish in enclosures. Shoots or traps predators, or erects structures to frighten predators away. Burns garbage in incinerator.

GED: 2 SVP: 4 PA: M 3 4 EC: B 4 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K'F M E C 4 4 4 4 <u>4</u> 4 4 4 4 4 4	3 1	2 3 Y

7319-134 SEALER (fishing)

Kills and skins seals for pelts and flippers:

Walks on ice or operates or rides in boat to reach seals. Shoots seals with high-powered rifle, or clubs seals on head to kill them. Slits skin along belly of dead seal and severs skin around head and flippers, using flensing knife. Cuts and removes flippers from seal. Flenses pelt from seal with knife, leaving layer of blubber attached to skin. Loads pelts and flippers onto boat by hand or using winch. Unloads pelts from boat at dock or processing plant, if required. Sells flippers to public at dock, if required.

GED: 2 SVP: 2 PA: M 3 4 7 EC: O 4 6 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	3 1	2 Y

7319-138 SEAWEED GATHERER (fishing)

Gathers seaweed from beach, rocks or shallow water at low tide: Walks on shore or operates or rides in boat and gathers seaweed into basket, wagon or boat, by hand or using rake or pitchfork. Picks sand, stones, shells and foreign materials from seaweed. Loads seaweed into cart or wagon, using pitchfork. Drives tractor or horse to transport seaweed to processing plant. Spreads seaweed on beach or roadway to dry, if required. Gathers seaweed underwater, if required, wearing diving apparatus.

GED: 2 SVP: 2 PA: M 3 4 EC: O 4 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 4 5 <u>4</u> 4 <u>4</u> 5	3 1	2

7319-142 WHARF WORKER, FISHING (fishing)

Unloads catch from vessel, and assists crew members in preparing vessel for next trip:

Assists crew in mooring vessel to dock. Stands in hold and shovels catch toward mouth of pneumatic hose. Loads catch into boxes, cargo net, crane bucket or conveyor, by hand or using shovel, gaff (hooked prong) or fork. Sorts and grades catch according to size and species. Shovels chipped ice over catch or covers with water or kelp as temporary preservative. Places diseased or spoiled fish on conveyor belt or loads fish into wagon or truck. Washes fish-storage boxes and assists crew in swabbing decks and hosing down hold of vessel. Assists crew in chipping, painting and greasing vessel. Loads boxes, nets, ropes and other fishing gear into vessel to ready vessel for next trip. Blows chipped ice into hold for use as refrigerant, using blower.

GED: 2 SVP: 2 PA: H 3 4 EC: B 4 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 <u>4</u> 5 <u>3</u> 4 <u>3</u> 4 5	3 1	2 3

7319-146 FISH-HATCHERY WORKER (fishing)

Assists other workers to collect, incubate and rear fish, and maintains premises and grounds of fish hatchery:

Assists other workers with collection of adult brood fish from streams, lakes and ponds. Drives tank truck to transport fish from collection site to sorting and holding ponds of fish hatchery, and to head pond or reservoir above dam. Turns valve on tank of truck to release fish into water. Sterilizes equipment to prepare incubation facilities. Places trays of fertilized eggs in disinfectant solution and rinses eggs in water tank. Picks out unfertilized eggs from incubator tray, using long-handled tweezers, and counts and records number of eggs removed. Weighs feeding ration and scatters food on surface of water in rearing ponds, or fills automatic feed dispenser. Removes dead fish from rearing ponds, using net, and records loss. Captures sample fish and culs small fish from pond, using net. Transfers fish in water-filled containers to larger rearing ponds or tanks as fish mature. Demonstrates fin clipping and tagging to other workers. Opens gates of rearing ponds to release young fish into river. Transfers young fish to tanks in truck or airplane and packs fertilized eggs in insulated cases for delivery to ponds, streams or other fish-culture stations. Transports feed and supplies to fish hatchery. Drains water from rearing ponds or tanks, shovels out muck and debris, and scrubs enclosure with wire brush and disinfectant solution. Maintains and repairs rearing ponds, buildings, equipment and grounds of hatchery.

GED: 2 SVP: 5 PA: M 3 4 7 EC: B 4 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 <u>4</u> 4 <u>4</u> 3 4 4 4	3 1	2 Y

7319-150 LOBSTER-POUND ATTENDANT (fishing)

Tends lobster pound to store lobsters for commercial markets: Assists in unloading lobsters into tidal pond enclosures along sea shore, into water-immersible crates or into sea water tanks. Starts pumps and turns valves to maintain constant flow of sea water through tanks. Pushes plugs into thumb joints of lobster's claws or places band around claws to prevent lobsters from injuring each other. Drives boat and scatters food on surface of tidal ponds. Inspects condition of lobsters and culls weakened ones for canning. Catches mature lobsters from tidal pond enclosures, using funnel-shaped net dragged behind boat, or removes lobsters from crates or tanks, using hand net. Weighs and grades lobsters for shipping. Builds shipping crates if required, using hammer and nails. Assists other workers in packing lobsters for shipment. Records number of lobsters caught, weighed, graded and shipped. Directs activities of other workers, if required. Cleans tanks, using brushes and fungicide solution. Orders supplies.

GED: 2 SVP: 3 PA: H 3 4 EC: O 4 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 <u>4</u> 4 4 4 4 5	1 3	2 Y

7319-154 FISH TAGGER (fishing)

Attaches identification tags to fish:

Assists other workers in capturing fish from rearing ponds and in transferring fish to tubs or tanks, using nets. Pours anaesthetic solution into water to anaesthetize fish. Places anaesthetized fish on worktable. Measures fish and records measurements. Weighs fish on gram balance scale and records weight. Removes fish fins, using scissors or fin clippers. Fastens tag to specified parts of fish. Records tag number and total number of fish tagged. Places tagged fish in separate tanks.

GED: 2 SVP: 2 PA: L 4 7 EC: I 4 7 DPT: 5 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 <u>4</u> 4 4 <u>4</u> 4 4 5	1 3	2

7319-199 FISHING, TRAPPING AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fishing and trapping, and related occupations not presently classified in Unit Group 7319.

FORESTRY AND LOGGING OCCUPATIONS

This major group includes occupations concerned with the conservation and protection of forests; the felling of timber; and the cutting and removing of logs and other products from forests. These occupations are classified in the following minor group:

751 Forestry and Logging Occupations

751 – FORESTRY AND LOGGING OCCUPATIONS

This minor group includes occupations concerned with maintaining and protecting forests; cutting and evaluating timber; moving logs from logging site to storage or transportation areas; planting trees; and assembling log booms. These occupations are classified in the following unit groups:

- 7510** Foremen/Women, Forestry and Logging Occupations
- 7511** Forestry Conservation Occupations
- 7513** Timber Cutting and Related Occupations
- 7516** Log Inspecting, Grading, Scaling and Related Occupations
- 7517** Log Hoisting, Sorting, Moving and Related Occupations
- 7518** Occupations in Labouring and Other Elemental Work, Forestry and Logging
- 7519** Other Forestry and Logging Occupations

7510-FOREMEN/WOMEN, FORESTRY AND LOGGING OCCUPATIONS

This unit group includes occupations as described under master title 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.), concerned with supervising and co-ordinating activities of workers engaged in maintaining and protecting forests; cutting and evaluating timber; moving logs from logging site to storage or transportation areas; planting trees; assembling log booms; and performing other forestry and logging activities.

7510-114 FOREMAN/WOMAN, LABOURERS AND OTHER ELEMENTAL WORKERS (forest. & log.)

Supervises and co-ordinates activities of labourers and elemental workers concerned with conserving forests and woodlots, loading and piling logs and performing other elemental activities in forestry and logging. (Unit Group 7518):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

7510-110 FOREMAN/WOMAN, FORESTRY-CONSERVATION OCCUPATIONS (forest. & log.)

Supervises and co-ordinates activities of workers concerned with serving forested areas and woodlots, and protecting them from fire, disease and other hazards. (Unit Group 7511):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

7510-118 FOREMAN/WOMAN, LOG-HOISTING, SORTING, MOVING AND RELATED OCCUPATIONS (forest. & log.)

Supervises and co-ordinates activities of workers concerned with rigging log-yarding systems, hoisting cut logs, moving them from site of operations, sorting logs at points of assembly, and forming log booms on water (Unit Group 7517):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

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7510-122 FOREMAN/WOMAN, LOG-INSPECTING, GRADING, SCALING AND RELATED OCCUPATIONS (forest. & log.)

Supervises and co-ordinates activities of workers concerned with inspecting and grading logs and estimating their volume and marketable contents, (Unit Group 7516):

Performs duties as described under master title 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

and trains seasonal and subordinate personnel. Visits industrial forestry operations and public camping sites to ensure compliance with safety and fire regulations. Issues fire permits and answers questions about wildlife and fishing and hunting regulations. Participates in search for lost travellers and campers. Renders assistance or first aid to lost or injured persons. Plants trees, participates in fire-control programs, and performs other seasonal tasks.

GED: 4 SVP: 6 PA: M 4 5 6 7 EC: O DPT: 3 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 3 3 4 4 4 4 3 4	9 1 7	6 9 0 1

7510-126 FOREMAN/WOMAN, TIMBER-CUTTING AND RELATED OCCUPATIONS (forest. & log.)

Supervises and co-ordinates activities of workers concerned with marking trees for cutting, preparing wooded area for logging operations, and felling, bunching, de-liming and cutting trees into logs, (Unit Group 7513):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

7511-112 FOREST-FIRE OFFICER (gov. serv.)

Performs a variety of duties to prevent and fight forest fires and to train and lead crew of forest-fire fighters:

Instructs fire-fighting crew in operation of fire-fighting vehicles and other equipment. Conducts field training exercises. Inspects high-risk points in forest for fire hazards, and enforces fire regulations. Conducts burning-out operations to reduce fire hazards and to limit spread of fire. Co-ordinates fire-fighting operations, and directs and assists fire-fighters. Arranges for provision of food, shelter and clothing for fire-fighters. Requests additional fire-fighters, equipment and supplies, if required. Evacuates area as directed. Checks to ensure that equipment is serviceable. Directs and assists seasonal workers to carry out pest control programs. Assists fish and wildlife officers, lands and parks officers, forest officers, and other conservation personnel during peak work periods. Prepares operational reports.

GED: 4 SVP: 6 PA: L 3 4 5 6 EC: O 3 6 DPT: 3 3 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 4 4 3 4 3 4 3 3 4	9 1	8 9 1

7511-FORESTRY CONSERVATION OCCUPATIONS

This unit group includes occupations concerned with conserving forest areas and woodlots, and protecting them from fire, disease and other hazards. Occupations concerned with research and development of forests and wooded areas are classified in Unit Group 2139, OTHER OCCUPATIONS IN LIFE SCIENCES, and Unit Group 2135, LIFE SCIENCES TECHNOLOGISTS AND TECHNICIANS. Occupations concerned with enforcing and advising on governmental forestry regulations are classified in Unit Group 1116, INSPECTORS AND REGULATORY OFFICERS, GOVERNMENT.

7511-114 FIRE LOOKOUT (gov. serv.)

Observes, locates and reports forest fires from lookout station: Surveys forest through binoculars from lookout station to detect fires. Reads area map to determine location of fire, and reports location to base camp, using two-way radio or telephone. Receives and relays messages concerning fire hazards, emergencies, accidents and location of crews and personnel, using two-way radio or telephone. Reads meteorological instruments daily and records weather conditions, temperature, relative humidity, wind direction and velocity, and other related data.

GED: 3 SVP: 4 PA: L 4 5 6 7 EC: I DPT: 3 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 4 3 3 4 4 4 4 4	9 1	6 0 9

7511-110 FOREST OFFICER (gov. serv.)

Patrols designated area of forest to inventory timber tracts, ensure that forest regulations are enforced and to report hazardous conditions:

Travels on foot or horseback or drives vehicle to patrol area of forest, and checks forest conditions. Reports findings and receives and relays emergency calls, using two-way radio. Observes, measures, records and maps forest data, such as tree species, topographical features, burned and cutover areas, experimental plots, tree seeding mortality, volumes of marketable timber, and timber sale areas. Compiles data from recording and measuring instruments such as rain gauge, thermometer, stream-flow recorder and soil-moisture gauge. Supervises

7511-118 TREE PRUNER (forest. & log.)

Prunes and thins forest trees to improve timber quality and growing conditions:

Removes lower limbs from young trees, using saws, pruners and loppers, to increase volume of knot-free lumber when tree matures. Cuts

out diseased trees and undesirable species, using powersaw or brush-knife. Cuts out young trees to reduce competition for light and nutrients among desirable trees in stand, and to promote better growth. Cuts notches in trunks and smears toxic chemicals into notches, or sprays leaves with chemicals to kill undesirable trees. Plants trees and sprays them with pesticides, if required.

GED: 2 SVP: 2 PA: M 3 4 EC: O 6 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 5 5 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	1 3	2 3

7511-122 FOREST-FIRE FIGHTER (forest. & log.; gov. serv.)

Fights forest fires, working as crew member:

Fells trees, digs trenches and extinguishes flames and embers to fight fires and to establish fire-breaks, using axe, chainsaw, shovel and hand- or engine-driven pumps. Cuts brush, clears ground litter and ignites back fire to hasten burnout of major fire within contained area, and to prevent its spread across fire-break. Patrols burned area after fire to watch for hot spots that may restart fire. Cleans, services, tests and stores fire-fighting equipment.

GED: 2 SVP: 2 PA: H 3 4 EC: O 3 6 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 5 5 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 4 4	1 3	8 2 3

7511-199 FORESTRY CONSERVATION OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with conserving forest areas and woodlots, and protecting them from fire, disease and other hazards, and related occupations not presently classified in Unit Group 7511.

7513-TIMBER CUTTING AND RELATED OCCUPATIONS

This unit group includes occupations concerned with marking trees for cutting; preparing wooded areas for logging operations; and felling and cutting trees.

7513-110 TREE-HARVESTER OPERATOR (forest. & log.)

Operates a variety of mobile machines to fell trees and to delimb, saw, bunch, load and transport trees or logs:

Pushes and pulls levers and depresses foot pedals to drive machine to logging site. Moves levers to operate boom equipped with grapple that holds tree, and to operate shear or saw that severs tree at base. Operates controls to guide boom and grapple that lift tree and feed it into jaws of processor, or that place tree on cradle of machine for delimiting or transporting. Operates controls to regulate rate at which tree is delimbed and length of logs cut. Operates controls to pile or dump trees or logs on ground in forest or at roadside, or to load trees or logs onto trucks. Services machine and makes minor repairs.

GED: 3 SVP: 5 PA: L 4 7 8 EC: O 5 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 3 5	1 3 9	2 Y

7513-112 FELLER-BUNCHER OPERATOR (forest. & log.)

Operates mobile feller buncher machine to fell and pile trees:

Drives machine to logging site. Moves levers to operate boom equipped with grapple that holds tree, and to operate shear or saw that severs tree at base. Moves levers to guide boom and grapple to lift, position, lower and release tree onto pile. Writes work reports and submits them to supervisor. Services machine and makes minor repairs.

GED: 3 SVP: 4 PA: L 4 7 8 EC: O 5 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 3 5	1 3 9	2 Y

7513-113 TREE-PROCESSOR OPERATOR (forest. & log.)

Operates a variety of mobile machines to delimb, to cut into lengths or to bunch felled trees at roadside or in forest cutting area:

Drives machine to logging site. Operates controls of hydraulic boom and grapple to lift felled whole or delimbed trees and to position them for processing. Operates controls to delimb trees. Operates controls to saw lengths of wood. Operates or sets controls to sort pulpwood logs or lumber logs into piles or bins. Controls particular functions such as hydraulic-grapple loading or delimiting and sawing if machine requires two operators. Frees jammed logs, using grapple, axe or hook. Shovels earth, sawdust and other debris from machine. Services machine and makes minor repairs.

GED: 3 SVP: 4 PA: M 4 7 8 EC: O 5 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 3 5	1 3 9	2 Y

7513-114 TIMBER MARKER (forest. & log.)

Selects and marks timber for cutting according to size, condition and forest conservation policies:

Walks through forest ahead of cutting crew. Measures diameter of trees, using calipers, and estimates length of trees. Consults board-foot volume tables and selects trees for cutting. Records and reports number of trees cut and number of trees left for seed. Paints marks on trees selected for cutting, using pressure gun. Blazes with axe to mark trails, fire lanes or cutting boundaries, if required.

GED: 3 SVP: 5 PA: L 4 EC: O DPT: 3 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 <u>4</u> <u>3</u> 4 4 4 4 4 4	9 1 3	2 6 9

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7513-118 FALLER AND BUCKER (forest. & log.)

Fells trees with chain saw, and saws felled trees into logs: Determines direction of tree fall for safety, minimum damage and easy hauling. Clears brush from base of tree, trims low branches and snags, and fells saplings and dead trees to prevent accidents, using axe and chain saw. Saws V-shaped undercut in tree trunk on opposite side to which tree should fall, and makes saw cut on opposite side towards undercut. Hammers wedge into undercut or pushes tree by hand or with pole to start fall. Trims branches from felled tree and saws tree top off. Saws trunk into logs of standard lengths, using chain saw and measuring pole. Marks stumps and corresponding log butts to provide record of production. Sharpens chain saw, using files. Lubricates, fuels and makes minor repairs to chain saw. Lifts, carries and piles short logs, or bunches longer ones for skidding, working alone or with assistance of another logger. Cuts trees and underbrush to facilitate passage of logging trucks in forest, if required.

GED: 2 SVP: 3 PA: H 3 4 EC: O 5 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	9 1 3	2 Y

7513-122 LOGGER, ALL-ROUND (forest. & log.)

Fells trees, and cuts, stacks and skids logs in small logging operation: Clears underbrush from work area to facilitate logging operations, using bush knife, axe and chain saw. Fells trees and trims branches from felled trees, using axe, hand saw or chain saw. Saws felled trees into logs of specified length, using cross-cut saw or chain saw. Stacks logs on ground, truck bed or skidder, or fastens choker around logs and drives tractor to skid logs to loading area.

GED: 2 SVP: 3 PA: H 3 4 EC: O 5 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 5	1 3 9	2 Y

7513-126 SWAMPER (forest. & log.)

Clears ground of underbrush and other obstructions in forest areas to facilitate logging operations: Cuts underbrush and clears ground of other obstructions preparatory to construction of logging roads, skidding trails, yards or landings, using chain saw, axe, brush hook and other hand tools. Lays out small trees and slash (waste wood) on ground to provide firm base for heavy equipment in marshy or low-lying areas. Piles and burns slash, and digs trench around pile to control fire. Digs trench around stumps to facilitate their removal. Operates track-mounted machine to crush or remove stumps or to knock over and move larger trees, if required. Fastens chokers around logs preparatory to skidding them out of logging area, if required. Oils, lubricates and sharpens chain saw, and maintains other equipment.

GED: 2 SVP: 2 PA: H 3 4 EC: O 5 6 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	3 1	2 3

7513-130 FALLER (forest. & log.)

Fells trees with chain saw:

Determines direction of tree fall for safety, minimum damage and easy hauling. Clears brush from base of tree, trims low branches and snags, and fells saplings and dead trees to prevent accidents, using axe and chain saw. Saws V-shaped undercut in tree trunk on opposite side to which tree should fall, and makes saw cut on opposite side towards undercut. Hammers wedge into undercut or pushes tree by hand or with pole to start fall. Trims branches from felled tree and saws tree top off. Sharpens chain saw, using files. Services and makes minor repairs to chain saw. Assists skidder operator in bunching felled trees.

GED: 2 SVP: 3 PA: H 3 4 EC: O 5 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	1 3	2 Y 3

7513-134 BUCKER (forest. & log.)

Saws felled trees into logs of standard lengths, and piles logs:

Saws felled trees into logs of standard lengths, using chain saw and measuring pole. Lifts, carries and piles logs with assistance of another bucker, using hand-held hook. Sharpens chain saw, using files. Services and makes minor repairs to chain saw.

GED: 1 SVP: 2 PA: H 3 4 EC: O 5 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 4 5 <u>3</u> 4 <u>3</u> 4 5	1 3	2 3

7513-199 TIMBER CUTTING AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with timber cutting and related activities, and related occupations not presently classified in Unit Group 7513.

7516-LOG INSPECTING, GRADING, SCALING AND RELATED OCCUPATIONS

This unit group includes occupations concerned with appraising forest areas to estimate timber yield; recording data and preparing topographic maps for management planning; inspecting and grading logs; and estimating volume and marketable content of logs.

7516-110 TIMBER CRUISER (forest. & log.)

Surveys forest area to obtain estimate of volume of timber, to develop topographic maps, and to record area conditions for logging, land use and management planning:

Patrols forest area in established pattern (cruise line), and studies area to obtain physical data, using compass and measuring tape, and surveyor's level for measuring elevations. Measures diameter and height of trees in sample area, using tape and clinometer, and estimates

marketable wood content, using conversion tables. Bores wood samples from trees, using hand auger, and counts rings on core to determine age of tree. Writes field notes indicating timber types and sizes, distances, elevations, outstanding topographic features, and existing transportation and communication facilities. Prepares maps and reports indicating species, quality, size and estimated yield of timber, and topography of area cruised. Cuts blazes on trees with axe to mark trail or boundary, if required.

GED: 5 SVP: 7 PA: M 4 7 EC: O DPT: 2 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
2 3 3 2 3 4 4 4 4 4 4	1 7	0 6 1

7516-118 LOG SCALER (forest. & log.; pulp & paper; sawmill)

Estimates marketable content of logs for use as timber or pulpwood. Measures logs, using scale stick, tape measure, calipers or cube stick, and reads conversion tables to estimate marketable content of logs. Estimates amount of defective material caused by saw waste, defects, and condition of logs, and rejects logs containing excessive amounts of unsound wood. Marks end of logs to identify owner and to indicate best use for maximum timber yield. Records amount, condition and species of logs scaled.

GED: 3 SVP: 5 PA: L 3 4 EC: O DPT: 4 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 3 4 4 4 4 4 4 4	1 3	2 0

7516-122 LOG GRADER (forest. & log.; sawmill)

Grades logs at booming ground, mill-pond or in the woods: Cuts notch in log to determine condition of wood, using axe. Marks end of log with paint or stamping axe to designate it for veneer, pulp or lumber processing, according to condition, size, species and owner. Estimates board footage, using scale stick and conversion tables.

GED: 3 SVP: 5 PA: L 2 3 4 EC: O DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 4 3 4 4 4 4 4 4	3 1	2 0

7516-199 LOG INSPECTING, GRADING, SCALING AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with log inspecting, grading, and scaling, and related occupations not presently classified in Unit Group 7516.

7517-LOG HOISTING, SORTING, MOVING AND RELATED OCCUPATIONS

This unit group includes occupations concerned with rigging log-yarding systems; hoisting cut logs and moving them from

site of operations; sorting logs; assembling log booms; salvaging logs; and other related activities. Other hoisting and moving occupations are classified in Minor Group 931, OTHER MATERIAL-HANDLING AND RELATED OCCUPATIONS.

7517-110 STEEL-SPAR OPERATOR (forest. & log.)

Operates mobile machine equipped with steel spar to pull logs from forest to loading area:

Drives machine to loading site. Moves hand and foot controls to stabilize and level machine, to raise steel spar, and to tighten guylines. Directs choker hooker to attach cable to logs. Operates controls to skid logs attached to cable. Listens to whistle or two-way radio and observes hand signals to indicate where to place logs. Services and makes minor repairs to machine and equipment.

GED: 3 SVP: 6 PA: L 4 6 7 8 EC: I 5 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 3 4 5 3 4 3 3 5	9 1 3	2 Y

7517-114 RIGGING SLINGER (forest. & log.)

Installs ground rigging for yarding lines and directs workers to attach cables to logs to be hauled from forest to loading area:

Cuts notches around selected tree stumps, using axe and power saw. Attaches pulley and guylines to stumps, using spikes, cables, U-bolts, hammer and wrench. Threads haul line through pulleys and adjusts line tension. Selects logs to be hauled and directs workers to attach choker cables. Signals operator, using two-way radio or radio-controlled whistle, to skid logs to loading area. Removes rigging when area has been cleared.

GED: 3 SVP: 6 PA: H 2 3 4 EC: O 6 DPT: 6 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 3 4 5 3 3 3 4 5	9 1 3	2 Y

7517-118 LOGGING-TRACTOR OPERATOR (forest. & log.)

Drives tracked or wheel-mounted logging tractor to clear brush, level roads, skid logs and perform related tasks in logging area:

Operates hand and foot controls to drive tractor and position dozer blade to clear brush or stumps, and to level roads, skidder trails or yarding areas. Drives tractor and operates winch controls to skid logs from forest or to free stuck vehicles. Attaches one or more accessories such as tree shears, hoisting rack or scarifier to tractor, if required, using hand tools. Operates tractor and accessories to fell and bunch trees, to stack or load logs, to drag debris from logging area, and to perform related tasks.

GED: 3 SVP: 5 PA: L 4 7 8 EC: B 5 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 3 4 5 3 4 3 3 5	9 1 3	2 Y

MAJOR GROUP 75

7517-122 LOG-LOADING-MACHINE OPERATOR (forest. & log.)

Operates tracked or wheel-mounted crane or mobile loader to stack logs or to hoist logs onto logging trucks:

Pushes and pulls levers and depresses foot pedals to rotate, extend and lower crane boom and grapple, or to drive loader to slide grapple under logs. Operates controls to close grapple and to lift logs. Operates controls to sort logs according to size or species before loading. Positions crane boom over log pile or logging truck or drives loader into position near pile or truck. Operates hand control to open grapple and release logs onto pile or logging truck. Operates mobile loader equipped with blade to push logs from loaded trucks into water for transport or onto ground for processing. Services machines and makes minor repairs.

GED: 3 SVP: 5 PA: L 4 7 8 EC: I 5 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 3 4	9 1 3	2 Y

7517-124 SKIDDER OPERATOR (forest. & log.)

Operates trucked or wheel-mounted skidder machine to drag felled trees or logs from forest cutting area to roadside:

Operates hand and foot controls to drive skidder to cutting area. Operates controls to position steel blade under logs. Drives skidder to push logs or trees into bunches with blade. Pulls choker cables or signals other workers to pull cables from rear winch. Fastens choker cables around logs by hand, or backs skidder into position and operates controls to close mechanical grapple jaws around logs. Operates winch or grapple controls to draw and lift ends of logs towards skidder. Drives skidder to drag logs to roadside loading area. Operates winch control to slacken cable. Frees choker cables from logs by hand or operates controls to open grapple jaws to release logs. Services skidder and makes minor repairs.

GED: 3 SVP: 3 PA: M 3 4 7 8 EC: O 5 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 3 5	1 3 9	2 Y

7517-125 FORWARDER/BUNK SKIDDER OPERATOR (forest. & log.)

Operates tracked or wheel-mounted machine equipped with hydraulic loading boom and grapple to load and transport trees or logs from forest cutting area to roadside:

Operates hand and foot controls to drive machine to cutting area and to position hydraulic boom and grapple over felled trees or logs. Operates controls to close grapple and to lift, swing and release trees or logs into cradle or hydraulic bunk jaws of machine. Operates control to close bunk jaws when vehicle is fully loaded. Drives machine to carry or drag logs or trees to roadside. Operates controls to dump load or operates hydraulic boom and grapple to load or unload logs or trees. Services machine and makes minor repairs.

GED: 3 SVP: 3 PA: L 4 7 8 EC: O 5 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 3 5	1 3 9	2 Y

7517-126 BOOMBOAT OPERATOR (forest. & log.)

Operates motor-driven boat equipped with winch and serrated bowram to sort and push logs to booming area, or to break booms apart in mill-pond:

Operates boat to push and sort logs according to species, grade and markings. Pushes logs into booming area or fastens cables around logs and tows them to booming area where they are formed into rafts or booms. Drives boat against booms at mill-pond to assist in breaking them apart. Pushes logs to mill-pond deck to position them for processing at mill. Services and maintains boat and motor.

GED: 2 SVP: 4 PA: L 2 4 7 EC: B 4 5 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 4 4	9 1 3	2 Y

7517-130 BOOM WORKER (forest. & log.)

Assembles floating logs into booms for towing to mill, working as crew member:

Guides logs into designated bays (holding booms) with pike pole, working from floating logs. Closes bay with chain or cable to hold logs to await assembly into booms. Bores holes in boom sticks (side logs) and swifters (cross logs) with power-driven auger, and threads chain or cable through holes to form towing-boom frame. Opens holding boom and pushes logs with pike pole into towing-boom frame. Pulls frame closed and fastens with chain to bind boom together. Pulls winch cable to swifter, attaches cable, signals winch operator to pull swifter across boom and fastens swifter in place with chain. Sorts logs within holding boom according to size, if required. Signals boat operator to push log bundles into boom frames, if required.

GED: 2 SVP: 4 PA: H 2 3 4 EC: O 4 6 DPT: 6 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 2 5	1 3	2 3

7517-134 BOOM WORKER, MILL-POND (forest. & log.)

Breaks logs out of booms and feeds logs onto conveyor that moves logs from pond to saw or barker deck, working from catwalk on floating logs or boat:

Unfastens chains that hold boom sticks (side logs of boom frame) and pushes boom sticks apart. Operates power winch to pull swifters (cross logs of boom frame) off boom. Cuts wire straps that hold bundles of logs together, using axe or shears. Guides logs with pike pole from boom through channel to conveyor that moves them to saw or barker deck. Assembles boom sticks and swifters into booms for re-use.

GED: 2 SVP: 4 PA: H 2 3 4 EC: O 4 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 2 5	1 3	2 3

7517-138 LOG DRIVER (forest. & log.)

Moves logs downstream from logging sites to mills:
 Rolls logs from landing or truck into river, using cant hook or peavey.
 Positions and adjusts floating fin booms (anchored logs with fins attached) to guide logs around obstructions. Guides logs around obstructions and into current of river with pike pole, working from bank, boat or floating logs. Pulls or rolls key logs from log jams, using peavey or pike pole. Places and detonates explosives to break up log jams or to remove obstructions in river. Collects logs into booms to retain logs at mill. Patrols river bank and rolls salvaged logs into river, if required.

GED: 2 SVP: 4 PA: H 2 3 4 EC: O 4 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 2 5	1 3	2 3

7517-142 CHASER (forest. & log.)

Directs placement of logs hauled to loading area and unhooks choker from logs:
 Signals by hand to direct skidder operator where to drop logs in loading area for reloading onto logging trucks. Unhooks choker from logs by hand. Signals operator to pull chokers free from logs and to return rigging to woods. Attaches equipment such as chokers, lines, blocks and fire equipment to outbound rigging, as indicated by whistle signals from logging area. Assists in connecting and disconnecting rigging when steel-spar machine is being moved. Stamps logs with identifying marks, unhooks choker cables from skidder machines, cuts limbs from logs and performs similar duties, if required.

GED: 2 SVP: 4 PA: H 2 3 4 EC: O 6 DPT: 6 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	1 3	2 3

7517-146 LOADER, LOGGING TRUCK (forest. & log.)

Assists in loading logs onto logging truck:
 Attaches crane hook to log trailer and signals by hand for operator to lower trailer from truck bed to ground. Couples trailer behind truck and signals truck driver to position truck for loading. Climbs log pile and selects logs for loading according to species, size and length. Cuts remaining limbs and knots from logs, using axe or chain saw. Attaches crane tongs to logs and signals crane operator to lift logs. Directs operator to place logs on trailer to form balanced load. Releases crane tongs from logs. Hammers or paints owner's mark on end of logs. Fastens cables or straps around logs to secure load. Assists in loading railway flatcars, if required.

GED: 2 SVP: 4 PA: H 2 3 4 EC: O 5 6 DPT: 6 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 4 4	1 3	2 3

7517-150 CHOKER HOOKER (forest. & log.)

Hooks choker cables around logs to skid them from forest:
 Clears brush and earth from under log before fastening choker, using axe and shovel. Drags choker to log, passes one end under and around log and hooks it to sliding fastener on choker cable to form noose. Pulls cable from main line of machine winch and hooks to free end of choker. Assists in removing and installing rigging, if required.

GED: 2 SVP: 2 PA: H 2 3 4 EC: O 6 DPT: 8 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 4 4 5 <u>4</u> 4 <u>3</u> 4 5	1 3	2 3

7517-154 HYDRAULIC-AUGER OPERATOR (forest. & log.)

Operates tire-mounted tractor equipped with hydraulic auger to drill holes in boom sticks and head sticks used to contain floating booms:
 Manipulates levers to position hydraulic boom and auger over log to be drilled. Checks that logs are approximately same length and not split or rotten. Operates lever to drill and countersink hole at each end of log to form boom stick or head stick. Threads length of chain through hole at one end of each boom stick and both ends of each head stick, and clips ends of chain together. Counts boom sticks and head sticks to ensure there are enough to form boom. Changes and sharpens auger and countersink, using hand tools and files.

GED: 2 SVP: 2 PA: H 3 4 EC: O 5 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 <u>4</u> 4 5 <u>3</u> 4 <u>4</u> 4 5	1 3 9	2 3

7517-158 LOG SALVAGER (forest. & log.)

Operates boat to search for and salvage lost logs from waterway or shore:
 Steers boat along shore of waterway and searches for logs that have broken away from log booms. Fastens cable around logs on shore and operates boat to pull or roll logs into water. Hammers spike into floating logs and fastens tow rope to ring on spike. Operates boat to tow logs to sheltered area or delivers logs for sale at receiving station. Services boat and equipment and makes minor repairs.

GED: 2 SVP: 2 PA: M 2 3 4 EC: O 4 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 5 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	1 3	2 3

7517-199 LOG HOISTING, SORTING, MOVING AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with log hoisting, sorting and moving, and related occupations not presently classified in Unit Group 7517.

MAJOR GROUP 75

7518-OCCUPATIONS IN LABOURING AND OTHER ELEMENTAL WORK, FORESTRY AND LOGGING

This unit group includes occupations in labouring and other elemental work as described under term title 02-190 LABOURER/ELEMENTAL WORKER (any ind.), concerned with the conservation of forests and woodlots; loading and piling logs; gathering seed cones; and performing other elemental work in forestry and logging.

7518-110 LOG LOADER (forest. & log.)

Loads logs onto vehicles:

Positions skid poles with one end on ground and other end against vehicle to form rolling incline. Rolls logs up incline and onto bed of vehicle, using cant hook or peavey. Loads vehicle with weight evenly distributed to prevent tipping. Fastens chain or steel cable around load to hold it in position.

GED: 1 SVP: 2 PA: VH 2 4 EC: O 6 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 5 5 <u>4</u> 4 5 <u>4</u> 4 <u>3</u> 4 5	1 3	2 3

7518-114 SEED-CONE PICKER (forest. & log.)

Gathers seed cones from coniferous trees for reforestation purposes: Selects and picks healthy cones of uniform shape from ground or trees. Pulls cone-bearing branches within reach, using hooked pole, and removes cones. Climbs trees to reach cones, using climber's belt and spiked boots. Places picked cones in shoulder bag or other container. Transfers cones to sacks for delivery or for storage in drying sheds.

GED: 1 SVP: 2 PA: M 2 3 4 EC: O DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 5 5 <u>4</u> 5 <u>4</u> 4 <u>4</u> <u>3</u> 5	1 3	2 3

7518-118 SPRAYER (forest. & log.)

Sprays forest areas with insecticides, working alone or as member of team:

Carries spray equipment and insecticides to work area by hand or backpack. Pumps lever to create pressure on insecticide. Pushes lever or button on hose nozzle and directs spray over forest area. Drives tractor-tanker and operates controls in cab to activate tank sprayers.

GED: 1 SVP: 2 PA: VH 4 7 8 EC: O 6 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 5 5 4 4 5 <u>3</u> 4 <u>4</u> 4 5	1 3	2 3

7518-122 TREE PLANTER (forest. & log.)

Plants seedlings in predetermined areas for reforestation purposes: Carries wrapped seedlings and planting equipment to designated forest area. Digs holes of prescribed size, using shovel or hole digger. Places seedlings in holes and tramps dirt around seedlings, or places seedlings in portable planting device and actuates spring mechanism to force seedlings into ground. Paces off specified distance and repeats planting procedure.

GED: 1 SVP: 2 PA: H 3 4 EC: O DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 5 4 <u>4</u> 4 5 <u>4</u> 4 <u>3</u> 4 5	1 3	2 3

7518-126 PULPWOOD PILER (forest. & log.)

Piles pulpwood logs near logging road or along shore of waterway: Piles logs by hand or guides logs into position with cant hook or peavey while logs are lifted by mechanical means.

GED: 1 SVP: 1 PA: H 3 4 EC: O 6 DPT: 8 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 5 5 <u>4</u> 4 5 <u>4</u> 4 <u>3</u> 4 5	1 3	2 3

7518-199 LABOURERS AND OTHER ELEMENTAL WORKERS, FORESTRY AND LOGGING, OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, as described under term title 02-190, LABOURER/ELEMENTAL WORKER (any ind.) in forestry and logging, and related occupations not presently classified in Unit Group 7518.

7519-OTHER FORESTRY AND LOGGING OCCUPATIONS

This unit group includes other occupations in forestry and logging.

7519-199 FORESTRY AND LOGGING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with forestry and logging, and related occupations not presently classified in Unit Group 7519.

MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCUPATIONS

This major group includes occupations concerned with extracting mineral ores, crude petroleum, natural gas, water, coal, potash, and other minerals from underground or open-pit mines, quarries, and oil and natural gas fields. This major group also includes occupations concerned with extracting peat moss from peat bogs. These occupations are classified in the following minor group:

771 Mining and Quarrying Including Oil and Gas Field Occupations

771 – MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCUPATIONS

This minor group includes occupations concerned with drilling to explore for or to extract oil and natural gas; operating a variety of drills to facilitate blasting, rock removal, and core-sampling; preparing, placing and detonating explosives; cutting, handling and loading minerals, waste and other materials in mines and quarries; and providing support activities for mining, quarrying, oil and gas field explorations and operations. These occupations are classified in the following Unit Groups:

- 7710** Foremen/Women, Mining and Quarrying Including Oil and Gas Field Occupations
- 7711** Rotary Well-Drilling and Related Occupations
- 7713** Rock and Soil Drilling Occupations
- 7715** Blasting Occupations
- 7717** Mining and Quarrying: Cutting, Handling and Loading Occupations
- 7718** Occupations in Labouring and Other Elemental Work, Mining and Quarrying Including Oil and Gas Fields
- 7719** Other Mining and Quarrying Including Oil and Gas Field Occupations

7710-FOREMEN/WOMEN, MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCUPATIONS

This unit group includes occupations as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.), concerned with supervising and co-ordinating activities of workers engaged in open-pit and underground mining and quarrying; oil, natural gas and water-well drilling and servicing; construction drilling projects; support workers; and labourers and other elemental workers in mining and quarrying including oil and gas fields.

7710-110 FOREMAN/WOMAN, BLASTING OCCUPATIONS (construction; mining & quarrying; oil & nat. gas)

Supervises and co-ordinates activities of workers engaged in preparing, placing, and detonating explosives to loosen ore in mines, to

loosen rock or stumps in construction areas, to demolish structures, to perforate oil and gas wells, or to explore for minerals, oil or gas (Unit Group 7715):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/ WOMAN (any ind.).

DPT: 1 3 8

7710-114 FOREMAN/WOMAN, CUTTING, LOADING AND HANDLING OCCUPATIONS (mining & quarrying)

Supervises and co-ordinates activities of workers primarily engaged in operating power-cutting and loading machines to remove minerals, coal, tar sands, waste, or similar materials in underground and open-pit mines or quarries, to load materials on conveyances, and to operate conveyors for removal of materials to processing, storage, or waste-depositing locations (Unit Group 7717):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

MAJOR GROUP 77

7710-118 FOREMAN/WOMAN, LABOURERS AND OTHER ELEMENTAL WORKERS (mining & quarrying)

Supervises and co-ordinates activities of labourers and other elemental workers engaged in supporting workers who harvest peat moss or who extract minerals from underground or open-pit mines and quarries (Unit Group 7718):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

7710-122 FOREMAN/WOMAN, OTHER ROCK AND SOIL DRILLING OCCUPATIONS (construction; mining & quarrying)

Supervises and co-ordinates activities of workers engaged in operating or helping to operate a variety of drills to facilitate the use of explosives in mining and construction projects, to tap sub-surface water deposits, to remove core samples, to bore raises in underground mines, or to bore foundation holes (Unit Group 7713):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.).

DPT: 1 3 8

7710-126 FOREMAN/WOMAN, OIL AND NATURAL GAS WELL SERVICES (oil & nat. gas)

Supervises and co-ordinates activities of workers engaged in testing and treating oil and natural gas wells to start or to increase production, and in servicing wells to clean or reactivate them (Unit Group 7711):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/ WOMAN (any ind.).

DPT: 1 3 8

7710-130 TOOL PUSHER (oil & nat. gas)

Supervises, co-ordinates, and participates in activities of workers engaged in drilling for oil and natural gas (Unit Group 7711):

Performs duties as described under master title, 01-250 SUPERVISOR; FOREMAN/ WOMAN (any ind.). Directs and participates in dismantling, loading, moving, unloading, setting-up and alignment of drilling rig and equipment. Inspects component parts of drilling rig, and orders repairs and maintenance.

GED: 4 SVP: 8 PA: M 2 3 4 5 6 EC: B 5 6 7 DPT: 1 3 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 3 4 4 3 4 4 3 4	9 5	4 5 0 1 Y

7710-199 FOREMEN/WOMEN, MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, as described under master title, 01-250 SUPERVISOR; FOREMAN/WOMAN (any ind.), concerned with supervising and co-ordinating the activities

of workers engaged in mining and quarrying including oil and gas field occupations, and related occupations not presently classified in Unit Group 7710.

7711-ROTARY WELL-DRILLING AND RELATED OCCUPATIONS

This unit group includes occupations concerned with rotary drilling to explore for or to extract oil and natural gas. Activities include: assembling, erecting and operating drilling rigs; lowering and raising drill pipes and bits, casings, and measuring instruments; treating wells to start or to increase production; cementing wells; servicing wells to clean or reactivate them, or to overcome difficulties associated with their operation; and servicing drilling rigs and related equipment. Occupations related to oil exploration and production which normally require specialized training are classified in Unit Group 2165, ARCHITECTURAL AND ENGINEERING TECHNOLOGISTS AND TECHNICIANS; Unit Group 2153, MINING ENGINEERS; and Unit Group 2154, PETROLEUM ENGINEERS. Inspecting and Testing Occupations associated with oil and natural gas well operations are classified in Unit Group 7719, OTHER MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCUPATIONS.

7711-111 DIRECTIONAL DRILLER (oil & nat. gas)

Plans and directs use of special drilling tools and procedures to correct deviations in oil and natural gas wells, to drill around obstructions in bore-holes, or to direct bore-holes to specified target area:

Confers with other personnel and studies well data to prepare directional- drilling program. Computes direction changes required to reach target area or to avoid obstructions. Draws scale plan of projected layout of well. Selects and delivers appropriate survey instruments and directional-drilling tools to well site. Assembles well-survey instruments, using hand tools, and directs lowering of instruments into well. Develops survey film, and examines film or survey graphs to determine location and orientation of bore-hole. Directs drilling-rig crew to lower, orient and operate whipstock (steel wedge) and pilot bit, down-hole drill motor and bent sub, or other directional equipment. Directs crew to control pumping pressure and weight applied to down-hole drill motor and bit. Writes operational report of survey results, calculations, and final layout of well.

GED: 4 SVP: 8 PA: L 4 5 6 EC: O 5 6 DPT: 2 3 1

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 3 4 4 3 4 4 3 4	9 1 7	0 Y

7711-112 ACIDIZING AND FORMATION-FRACTURING OPERATOR (oil & nat. gas)

Directs, supervises and participates in operation of blending, pumping and other equipment to force acid or fracturing fluid and solid particles into oil or natural gas well to stimulate production:

Confers with other personnel and examines well logs and core samples, or sends core samples for laboratory analysis to determine acidizing or fracturing materials and procedures to be used. Assigns duties

to equipment operators, and directs positioning of pumps, blenders, supply trucks and other equipment at well site. Supervises connection of pipes from pumps, blenders and trucks to well head. Installs pressure sensors on well head and reels out and connects cable from sensors to recorders. Connects communication cables between pumps, blenders and trucks to ensure co-ordination between pumping and blending operations. Directs equipment operators to check equipment, to test valves, and to ensure pipes are clear. Checks well-head installation, pipes and valves, and ensures that acid, fracturing fluid, chemicals and propping agents are blended in required proportions. Orders start of pumping and blending operations, and monitors pressure recorders and other instruments. Directs equipment operators to adjust or maintain pumping pressures for required period of treatment. Orders release of pressure and flushing of excess treatment fluid from well. Prepares operational reports. Services equipment and makes minor repairs.

GED: 4 SVP: 7 PA: L 4 5 6 EC: O 5 6 DPT: 1 3 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u>	9 1	4 0 Y

7711-118 DRILLER (oil & nat. gas)

Selects, repairs and directs use of down-hole tools used to remove broken or stuck drilling equipment from oil or natural gas wells, or to correct other drilling or servicing problems:

Confers with other personnel and examines work order to determine nature of problem and types of fishing tools, packers, or other down-hole tools required. Delivers tools to well site, and assembles tools. Directs coupling of tools to drilling or service rig. Directs operation of drilling or service rig and down-hole tools during fishing and servicing operations. Dismantles, cleans and repairs tools, using hand and power tools and equipment. Prepares operational reports.

GED: 4 SVP: 7 PA: L 3 4 5 6 EC: O 5 6 DPT: 2 3 1

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>4</u> <u>2</u> <u>4</u> <u>4</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u>	9 1	0 Y

7711-114 CEMENTER, OIL WELL (oil & nat. gas)

Operates mobile cement-mixing and pumping equipment to seal casings in oil or natural gas wells, to seal permeable rock formations, and to plug wells:

Couples hoses, pipes and pipe fittings for water, cement and slurry to mixing and pumping equipment, using hand tools. Directs other workers to attach loading head to well head, and to insert plugs into well head. Starts pumps and opens valves to test pipes, casing or tubing for leaks. Observes gauges, pressure recorder and indicators, and operates hand controls to mix cement slurry to required consistency and to pump slurry into well at specified rate. Stops pumps, and directs workers to insert top plug into well casing. Observes pressure gauges, and operates pumps which force water into well to push plug downwards and to squeeze cement to appropriate zone in well. Reports quantity and type of cement used, pressure and duration of pumping, and other cementing data. Services equipment and makes minor repairs.

GED: 4 SVP: 6 PA: H 3 4 8 EC: O 4 5 6 DPT: 3 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>4</u> <u>3</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>5</u>	1 9	0 Y

7711-118 DRILLER (oil & nat. gas)

Operates rotary table, draw works, and cathead of drilling rig to bore oil and natural gas wells:

Observes pressure gauge and moves throttles and levers to control speed of rotary table and pressure on bit at bottom of bore-hole. Operates cathead (winch) to provide torque for connecting or disconnecting sections of drill pipe or casing. Pushes levers to control draw works which lowers and raises drill pipe and casing into and out of well. Examines operations of slush pumps and monitors gauges to ensure proper circulation, consistency and pressure of mud (drilling fluid) in well. Examines drillings or core samples from bottom of well to determine nature of strata. Selects and changes drill bit according to condition of bit and nature of strata. Recovers lost or broken bits, casing and drill pipes from well, using special tools attached to end of drill pipe or cable. Directs lowering and raising of test instruments to ensure that drill deviation does not exceed specified limits. Records footage drilled, location and nature of strata penetrated, and materials used. Inspects and tests blowout equipment. Repairs or replaces defective parts of machinery, using hand tools. Drills off-shore wells from drilling barge, ship or platform, if required.

GED: 4 SVP: 7 PA: M 2 3 4 7 8 EC: O 5 6 DPT: 3 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>4</u> <u>3</u> <u>4</u> <u>4</u> <u>3</u> <u>4</u> <u>5</u>	9 1	0 Y

7711-122 MOTORMAN/WOMAN (oil & nat. gas)

Operates and maintains stationary engines to supply power for rotary oil-drilling machinery, and assists other workers at well site:

Starts gasoline, natural gas, diesel or diesel-electric engines, and operates brakes and levers to provide power during drilling operations. Operates low-pressure steam boiler during cold weather to supply heat to motors and heating system. Tends generators to supply power for lighting system. Assembles and dismantles pumps and other drilling equipment, using hand and power tools. Assists other workers to join or to disconnect sections of drill pipe and casing, using tongs. Services and repairs equipment. Prepares engine maintenance reports and work logs.

GED: 3 SVP: 6 PA: H 2 3 4 8 EC: O 4 5 6 7 DPT: 3 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>4</u> <u>3</u> <u>4</u> <u>4</u> <u>3</u> <u>4</u> <u>5</u>	9 1	0 Y

7711-131 SNUBBING-UNIT OPERATOR (oil & nat. gas)

Operates rig-assisted snubbing equipment to force drill pipe, tubing or casing into or out of oil or natural gas wells against high well-pressure: Directs and assists drilling or service-rig crew to hoist snubbing equipment into position at well head. Assembles snubbing equipment, attaches to well head, and connects hydraulic lines from pump to snubbers and controls, using hand tools. Threads cables through pulleys on snubbing equipment and travelling block of rig. Signals rig operator to co-ordinate operation of rig draw works with operation of snubbers.

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Operates hand controls to alternately open and close travelling and stationary snubbers which clamp pipes being inserted or withdrawn from well. Services equipment and makes minor repairs. Operates self-contained hydraulic snubbing unit to perform standard work-over of wells where space is limited, such as on off-shore platforms, if required.

GED: 3 SVP: 6 PA: H 3 4 8 EC: O 5 6 DPT: 3 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 3 4 3 4 5 3 4 3 4 5	9 1	0 Y

7711-133 WIRE-LINE OPERATOR (oil & nat. gas)

Operates truck or skid-mounted powered winch to lower and operate various wire-line tools and instruments on electrical conductor cable to service or assist in completion of oil and natural gas wells:

Drives truck to various well sites. Directs and assists helper to attach cable pulley to hoisting block of drilling or service rig, or to erect ginpole and pulley over well head. Installs well-head pressure control devices, using hand tools. Assembles string of wire-line tools or instruments and attaches to wire line, using hand tools. Operates controls to raise, align and lower tools over well head. Monitors depth indicator, casing collar locator or other instruments, and operates controls to lower tool string to specified depth or point of obstruction. Operates controls to activate well-logging and survey instruments or tools such as packers, plugs, back-off explosive devices, or perforating guns at required level. Operates controls to lower and raise paraffin cutting tools, swabbers or other devices to remove deposits or obstructions from inside tubing, screens or perforations. Operates controls to position and activate fishing tools to probe for and pull broken or lost tubing, cable or tools from well. Services and repairs equipment and tools.

GED: 3 SVP: 6 PA: H 3 4 8 EC: O 4 5 6 DPT: 3 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 3 4 3 4 5 3 4 3 4 5	9 1	0 Y

7711-134 DERRICK WORKER (oil & nat. gas)

Guides drill pipe sections to and from storage racks in derrick and while pipe is being hoisted from or lowered into oil or natural gas well, and operates and maintains drilling-fluid mixing and pumping system:

Stands on platform aloft in derrick, pushes and pulls elevator (clamp) into position, and closes elevator on top of drill-pipe section to allow section to be lowered and connected to drill string. Seadies suspended pipe by hand while connection is made. Guides lengths of drill pipe into storage racks, and releases elevators during removal of drill string from well. Operates controls of mixing equipment to mix drilling fluid (mud) to required consistency. Operates pump controls to circulate mud through drill string and bore-hole to cool drill bit and to flush cuttings from hole. Takes samples of drill cuttings and mud. Weighs mud samples, performs viscosity, pH, and other tests, and records results. Assists in assembly, rigging and dismantling of derrick and mixing and pumping system, using hand and power tools.

GED: 3 SVP: 6 PA: VH 2 3 4 8 EC: O 4 5 6 DPT: 3 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 4 4 5 3 4 3 4 5	1 9	Y 0

7711-138 SERVICE-RIG OPERATOR (oil & nat. gas)

Operates truck-mounted derrick and draw works to perform duties related to completion, work-over or abandonment of oil or natural gas wells:

Drives rig to well site. Operates controls to raise derrick and to level rig. Directs and assists helper to thread cable through pulleys in derrick and travelling block and to connect hydraulic lines, using hand tools. Installs pressure-control devices on well head, using hand tools. Attaches clamp to top of production tubing or pump rods, and operates controls to pull tubing or rods from well for salvage or repair. Disconnects section of tubing or pump rod, using slips, wrenches and power tongs. Operates controls to hoist and lower sections of tubing or drill pipe into well, and connects sections to tubing string or drill string, using slips, wrenches and power tongs. Monitors depth and weight indicators, and operates draw works and power swivel controls to drill through cement, packers, plugs or other obstructions in well. Operates rig controls to clean or scrape casing or tubing, using swabs or paraffin cutters attached to drill string. Operates controls to lower and actuate packers, pressure-recording instruments or other devices at required depths. Operates controls to lower special tools into well to recover broken tubing or pump rods. Mixes and pumps cement to seal well holes. Lowers and detonates free-point explosive devices to break casing, if required. Positions and operates hydraulic jacking equipment to assist rig in pulling casing from well in preparation for abandonment of well, if required. Services equipment and makes minor repairs.

GED: 4 SVP: 7 PA: H 3 4 8 EC: O 4 5 6 DPT: 3 6 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 4 4 5 3 4 3 4 5	1 9	0 Y

7711-140 POWER-TONG OPERATOR (oil & nat. gas)

Installs and operates power tongs to help connect well-casing sections during casing of oil or natural gas well:

Drives truck to various well sites. Directs and assists drilling crew to hoist and attach power tongs to drilling-rig tong assembly. Connects hydraulic lines to pump on truck and to power tong controls, using wrenches. Starts pump motor and operates controls to maintain required pressure. Guides power tongs by hand into contact with well-casing section. Pushes and pulls power-tong controls to turn casing section and to join it to casing string. Ensures that threaded joints are properly engaged. Observes pressure gauge to ensure that correct torque is applied to each casing joint. Services equipment and makes minor repairs.

GED: 3 SVP: 5 PA: H 3 4 8 EC: O 5 6 DPT: 3 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 3 4 5 3 4 3 4 5	9 1 3	2 0 Y

7711-148 REELED-TUBING OPERATOR (oil & nat. gas)

Operates mobile or skid-mounted reeled-tubing equipment to service oil or natural gas wells:

Directs and assists helper to position rig and to attach well-head devices, pipes and injector unit to well head, using hand tools. Manipulates controls to unreel tubing through injector guides into well. Sets depth recorder to zero, and operates controls to force tubing into well to required depth. Operates controls and valves to regulate flow of compressed air or fluids and chemicals through tubing to agitate sediments and deposits and to clean well. Operates tubing unit with down-hole drills or other tools to bore through plugs, to drill shallow wells, to retrieve broken or lost equipment, and to perform related services. Operates tubing unit to deposit acid or cement at specified points in well or to pressure-test pipes for leaks. Prepares records of services provided. Services equipment and makes minor repairs.

GED: 3 SVP: 5 PA: H 3 4 8 EC: O 4 5 6 DPT: 3 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 4 5	9 1	0 Y

7711-152 WELL-TREATMENT BLENDER OPERATOR (oil & nat. gas)

Operates mixing and pumping equipment to blend and proportion fracturing fluid, granular propping agents, acids, inhibitors and other chemicals during formation-fracturing and acidizing-stimulation treatments of oil and natural gas wells:

Drives blender truck into position, and directs and assists other workers to connect hoses and pipes to pumps and other equipment, using hand tools. Operates pump controls and opens valves to pressurize pipes and to test pipes for leaks. Pours or directs helpers to pour bags of dry chemicals into mixer, and operates controls to blend dry chemicals and fluids. Monitors pressure gauges and operates blender controls to inject specified proportions of acid, propping agents or other chemicals or fluids into pipe lines at proper times. Reports pressure readings to other workers to help co-ordinate operations. Completes work reports. Services equipment and makes minor repairs.

GED: 3 SVP: 5 PA: H 3 4 EC: O 4 5 6 DPT: 3 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>4</u> 4 4 <u>3</u> 4 <u>4</u> 4 5	9 1	0 Y

7711-154 CEMENTER HELPER, OIL WELL (oil & nat. gas)

Helps to set up and control mixing and pumping equipment to seal casings in oil or natural gas wells, to seal permeable rock formations, and to plug wells:

Drives truck to various well sites. Couples pipes and hoses between pumps, mixer, and water and cement tanks, using hand tools. Positions loading head and attaches loading head to well head, using hand tools. Inserts plugs into well head as directed. Sprays equipment with oil to prevent cement from sticking. Opens and closes valves as directed, and pushes lever to control flow of dry cement into hopper of mixer. Collects and weighs samples of cement slurry. Observes pressure indicators during cementing operation, and reports observations. Disconnects pipes and hoses, using hand tools, and washes cement from equipment with water hose. Services equipment and makes minor repairs. See also definition for term title, 02-160 HELPER (any ind.).

GED: 3 SVP: 4 PA: H 3 4 EC: O 4 5 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 <u>4</u> 4 <u>3</u> 4 5	9 1 3	2 3

7711-158 FLOORMAN/WOMAN (oil & nat. gas)

Assists in assembling and operating machinery to drill oil or natural gas wells:

Assembles and disassembles casings and pipe sections, using hand and power wrenches and tongs. Sets curved metal wedges around pipe string at well head to prevent string sections of assembled pipe from dropping into well during change or addition of pipe sections. Tightens and loosens threaded joints between sections, using tongs or chain wrenches. Guides lower end of pipe sections to or from well openings. Assists derrick worker in mixing drilling mud, using power agitators. Digs drainage ditches, racks tools, and cleans drilling floor around rig. Assists in repair of drilling machinery, slush pumps and derricks. Assists in erecting and dismantling derrick equipment.

GED: 3 SVP: 4 PA: H 3 4 EC: O 4 5 6 DPT: 6 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 <u>5</u> <u>3</u> 4 <u>3</u> 4 5	9 1 3	2 3

7711-160 SERVICE-RIG-OPERATOR HELPER (oil & nat. gas)

Helps to operate oil or natural gas well service rig:

Drives service rig to various well sites. Threads cable through pulleys on derrick. Positions planks and turns jack stabilizers to level rig, using hand tools. Attaches hoisting cables to drill pipe sections and other equipment, signals rig operator, and guides equipment into position by hand. Operates power tongs and uses wrenches and slips to connect or disconnect drill bits, sections of drill pipe, tubing, pump rods or casing. Helps to set up and operate motors, pumps and cement mixers. Unloads and empties bags of drilling mud into tanks. Services equipment and makes minor repairs. Helps to set up hydraulic casing or tubing-pulling equipment, if required. See also definition for term title, 02-160 HELPER (any ind.).

GED: 3 SVP: 4 PA: H 3 4 EC: O 4 5 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 <u>5</u> <u>3</u> 4 <u>3</u> 4 5	9 1 3	2 3

7711-164 WELL-TREATMENT PUMP OPERATOR (oil & nat. gas)

Operates mobile or skid-mounted high-pressure pumping equipment during acidizing and formation-fracturing stimulation treatments of oil and natural gas wells:

Connects pipes between pump, blender and chemical, carbon dioxide or nitrogen tanker trucks, using hand tools. Starts pump motor, and opens valves to test pipes for leaks. Operates pump controls and observes gauges to control pumping of acid, formation-fracturing fluid, carbon dioxide or nitrogen from blender or tanker truck into well as directed. Prepares operational reports. Services equipment and makes minor repairs.

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GED: 3 SVP: 4 PA: H 3 4 EC: O 4 5 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 5 <u>3</u> 4 <u>3</u> 4 5	9 1 3	2 3

7711-165 WIRE-LINE-OPERATOR HELPER (oil & nat. gas)

Helps to set up and operate equipment used to lower wire-line tools and instruments on electrical conductor cable into oil or natural gas wells:

Helps to unload and install pulleys, ginpole and wire line at well head. Helps to assemble tools and instruments and to attach them to wire line, using hand tools. Pushes and pulls tools into alignment with well head. Signals wire-line operator when tools are properly aligned. Guides tools to floor of derrick after completion of operations. Services equipment and makes minor repairs. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 3 PA: H 3 4 EC: O 4 5 6 DPT: 6 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	9 1 3	2 3

7711-167 REELED-TUBING-OPERATOR HELPER (oil & nat. gas)

Assists in operation of mobile or skid-mounted reeled-tubing equipment to service oil or natural gas wells:

Drives truck to various well sites. Helps to unload and to attach well-head devices, pipes and injector unit to well head, using hand tools. Guides tubing into injector by hand. Starts compressor motor and operates controls to start compressor. Fills water and chemical tanks on reeled-tubing equipment. Completes vehicle log. Services equipment and makes minor repairs. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 3 PA: H 3 4 EC: O 4 5 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 5 <u>3</u> 4 <u>3</u> 4 5	9 1 3	2 3

7711-168 WELL-TREATMENT HELPER (oil & nat. gas)

Helps to assemble and dismantle high-pressure pumping and blending equipment used in formation-fracturing and acidizing-stimulation treatments of oil and natural gas wells:

Loads truck with pipes, fittings, and bags of chemicals. Opens valves to fill hoppers and tanks on tanker truck with fracturing fluids or acids. Drives truck or tanker truck to well site. Operates hoist controls and attaches slings and chains to unload pipes, valves and fittings. Helps to position and connect pipes, valves and other equipment between truck, blender and pump, using hand tools. Empties bags of chemicals into blender mixer. Connects hoses, and operates pump controls to transfer fracturing fluids, acid and additives into blender as directed. Completes vehicle log. Services equipment and makes minor repairs. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 3 PA: H 3 4 EC: O 4 5 6 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 5 <u>3</u> 4 <u>3</u> 4 5	9 1 3	2 3

7711-170 ROUSTABOUT (oil & nat. gas)

Performs general labouring duties in and about oil fields and pipelines:

Digs trenches for building foundations or for drainage around oil wells, storage tanks and other installations. Shovels earth into excavations. Loads and unloads trucks, and transports contents to work area by hand or using handtrucks. Mixes and tamps concrete into building forms. Helps to assemble, dismantle and lubricate boilers, pumps and other production machinery, to connect tanks and flow lines, and to erect service rigs over wells, using hand tools. Helps to tighten and unscrew drill pipe, casing, tubing and pump rods, using hand and power wrenches and tongs. Rolls and segregates pipe sections on racks in material yards to position pipes for testing or storage. Paints and makes minor repairs to buildings and other facilities. Helps to build fencing around buildings and equipment, using powered post-hole digger and hand tools. Soves snow or operates snowblower to remove snow from roads, buildings and equipment.

GED: 2 SVP: 3 PA: H 2 3 4 EC: O 6 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 <u>4</u> 5 <u>4</u> 4 <u>3</u> 5 4	1 3	2 3

7711-199 ROTARY WELL-DRILLING AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with rotary well-drilling and related activities, and related occupations not presently classified in Unit Group 7711.

7713-ROCK AND SOIL DRILLING OCCUPATIONS

This unit group includes occupations concerned with operating a variety of drills to facilitate the use of explosives in quarries, underground mines, and construction projects; to tap sub-surface water deposits; to obtain core samples for analysis of ore, soil, or foundation materials; and to break and separate rock.

7713-110 RAISE-BORING-MACHINE OPERATOR (mining & quarrying)

Operates raise-boring machine that drills and reams pilot hole to create vertical or angled raise between different levels in underground mine:

Builds wooden frame and pours concrete to construct base for raise-boring machine. Moves or drives raise-borer to work site, and sets up machine on base with assistance of other workers. Couples water hose and air hose or electric cable to machine, using hand tools. Moves hand levers and valves that activate hydraulic pistons and jacks to set drill at designated angle. Drills pilot hole, and monitors gauges indicating pressure and torque to ensure that drill bit follows designated path and that safe limits of operation are not exceeded. Uncouples

pilot drill bit, and connects reaming head to drill string after breakthrough to lower level. Adjusts controls to pull drill string upwards, forcing reaming head to cut into rock. Monitors gauges and adjusts pressure and speed for optimum operation of reaming head. Adds and breaks rods, using wrenches. Records distances drilled and reamed. Services raise-boring machine and makes minor repairs.

GED: 4 SVP: 7 PA: H 3 4 8 EC: I 4 5 6 7 DPT: 3 8 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 4 4	9 1	Y 0 8

7713-114 DRILLER, LONG HOLE (mining & quarrying)

Operates bar-mounted or mobile drill to bore long service or blasting holes in underground mine: Reads blueprints and sketches to determine location, direction, depth and number of holes to be drilled. Scales loose rock from walls, manipulates air hose to remove dust, installs roof bolts or timbers, and clears broken rock from drilling area as safety precautions. Assembles and secures drill and frame at work site, using hand tools, or moves mobile rig into position and operates controls to level and stabilize machine. Couples water and pneumatic hoses or electric lines to drill. Aligns drill along surveyed direction line, using spirit-level protractor, and locks drill into position. Operates controls to start drill and to regulate speed of drill. Adds drill rods and changes bits, using wrenches. Blows hole clean with compressed air after reaching specified depth, and places plug in hole to prevent sludge accumulation. Helps to charge holes with explosives, to erect barricades, and to guard blast area. Prepares reports of drilling operations. Services drilling equipment and makes minor repairs.

GED: 4 SVP: 7 PA: H 3 4 8 EC: I 4 5 6 7 DPT: 3 8 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 4 4	9 1	Y 0 8

7713-118 DRILLER, WATER WELL (mining & quarrying)

Operates truck-mounted rotary drilling rig to drill water wells: Drives drilling rig to work site, and starts gasoline or diesel power unit. Operates hand controls to extend hydraulic stabilizing jacks and to raise and extend telescoping derrick. Observes liquid level or plumb-line, and adjusts controls to level drilling rig. Bolts trusses to derrick and frame or inserts lock pins to secure derrick in vertical position. Connects hoses to pump to circulate drilling fluid which cools bit and flushes cuttings from drill hole, or to add water to compressed air which blows cuttings from hole. Listens to sound of drill, observes gauges, and adjusts levers to obtain optimum rotation and downward pressure on drill bit. Directs helper to change bits or to couple additional lengths of drill pipe, or adjusts controls to add lengths of drill pipe automatically. Operates winch to lower well-casing pipe into bore-hole. Cuts and welds casing pipe to required length. Pumps, bails or uses compressed air to blow water and sediment from well, and measures water-bearing capacity of well. Operates winch to lower filter screen into well, and applies mechanical pressure or adds chemicals to redistribute sand and gravel around filter screen, if required. Services equipment and makes minor repairs. Retrieves broken or lost tools from bore-hole, using special tools and winch. Operates electric or air-powered grinder to reshape bits.

GED: 3 SVP: 6 PA: H 3 4 6 8 EC: O 4 5 6 7 DPT: 6 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 3 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 3 5	9 1	0 Y

7713-122 DRILLING-MACHINE OPERATOR (construction; mining & quarrying)

Operates a variety of mobile drilling machines equipped with one or more percussion drills to bore blasting holes in rock or ore: Drives or helps to move machine into position at work site. Scales loose rock from roof and walls, removes debris, and installs roof bolts or timbers as safety precautions in underground mine. Marks drill hole locations with chalk or spray paint. Couples water hose and air hose or electric line to drill. Moves levers to stabilize machine and to position and align drill boom. Adjusts controls to start drill and to govern rotary speed, percussion rate, feed pressure and air pressure according to type of ore or rock being drilled. Positions additional rods by hand, and operates drill to attach rod to drill string. Changes bits, using wrenches and drill controls. Services machine and makes minor repairs. Loads holes with explosives and detonates blasts, if required.

GED: 3 SVP: 6 PA: H 4 8 EC: B 4 5 6 7 DPT: 6 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 3 5	9 1	Y 0 8

7713-124 ROTARY DRILLING-MACHINE OPERATOR (mining & quarrying)

Operates tracked or truck-mounted rotary drilling machine to bore large blastholes in open-pit mine or quarry: Operates hand controls or hand and foot controls to drive diesel or electric-powered drilling machine into position over stake. Operates controls and observes liquid level indicators to stabilize and level machine. Directs helper to position drill bit, and operates controls to couple bit to drill pipe. Manipulates hand controls and observes gauges to start drill and to regulate air pressure, rotary speed and downward pressure on drill bit according to type of rock being drilled. Drills hole to specified depth, and operates controls to add or remove drill pipe automatically. Directs helper to cover drilled hole, to position trailing power cable during moves, to assist in changing bits, and to perform related duties. Services drilling machine and makes minor repairs. Measures location and stakes out pattern of holes to be drilled, if required.

GED: 3 SVP: 6 PA: M 4 8 EC: I 4 5 6 7 DPT: 6 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 3 5	9 1	Y 0

7713-126 CORE-DRILL OPERATOR (construction; mining & quarrying)

Operates drilling equipment to obtain core samples of rock for analysis of geological character of ground, nature and extent of ore, or strength of foundation material: Reads plans or instructions indicating location, angle and depth of holes required. Assembles drilling equipment at work site, using hand

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tools. Fastens diamond bit, core-sampling device, and drill rod to machine, and attaches water swivel and hose to top end of drill rod, using wrenches. Starts power unit, or couples drill to compressed-air hose or electric cable to obtain power. Operates hand controls and observes gauges to drill hole in designated direction. Directs and assists helper to fasten additional rods to drill as bit advances. Withdraws and removes drill rods, using wrenches, or operates hoist controls to retrieve core-sampling device from specified depth. Removes core samples from sampling device, labels samples according to depth, and places samples in core box in proper sequence. Carries core box to collection point. Lowers and withdraws test instruments used to measure angle deviation of hole, if required. Marks collar of hole with paint. Operates cement mixer and pump to plug or grout hole, if required. Services drilling equipment and makes minor repairs. Installs support timbers, scales loose rocks, and constructs work staging when working in underground mine, if required.

GED: 3 SVP: 6 PA: H 4 8 EC: B 4 5 6 7 DPT: 6 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 4 5	9 1	0 Y

7713-134 DRILLER, SEISMIC PROSPECTING (oil & nat. gas)

Operates mobile rotary-drilling rig to drill bore-holes for placement of explosives in seismic prospecting: Drives rig to work area and positions rig over surveyed marker. Operates hand controls to raise drill mast and to hoist mud tank and other equipment into position. Couples water and drilling-fluid hoses to drilling equipment, using wrenches. Directs helper to mix drilling fluid to required consistency. Couples or removes bit and drill rods, using hoist controls and wrenches. Operates hand controls to start and regulate rotary action and downward pressure on bit to drill hole to specified depth. Removes drilling bit and adds coring bit to recover core samples, if required. Records daily drilling activities. Assembles explosive charges, lowers charges into bore-holes, and marks charged holes with flag. Plugs fired holes with sand, cement or other material as safety precaution. Services and makes minor repairs to drilling rig and equipment.

GED: 3 SVP: 5 PA: H 4 7 8 EC: O 5 DPT: 6 8 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 5	9 1	Y 0

7713-138 FOUNDATION-DRILL OPERATOR (construction)

Operates tracked or truck-mounted drill rig to drill holes for building foundations:

Drives drill rig to work site. Manipulates levers to extend hydraulic stabilizing jacks, to raise derrick and to level machine. Manipulates levers to rotate turntable on which drilling rig is mounted, and to position auger over point to be drilled. Manipulates levers and pedals to force auger into ground, and to periodically hoist auger clear of hole so that excavated material is thrown off by centrifugal force. Feels and observes drillings to determine if casing is needed to prevent collapse of bore-hole, and operates controls to hoist and lower casing or reinforcing steel into hole. Directs helper to attach or adjust auger

or bell reamer. Operates drill equipped with bell reamer which enlarges bottom of bore-hole to form footing or socket for concrete piles. Services and makes minor repairs to drill rig.

GED: 3 SVP: 5 PA: L 4 7 8 EC: O 5 6 DPT: 6 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 3 5	9 1	Y 0

7713-142 CHURN-DRILL OPERATOR (mining & quarrying)

Operates mobile churn (cable-tool) drill to bore water-wells: Drives truck-mounted drilling rig to work site. Manipulates lever to extend jackscrews to stabilize and level drilling machine. Starts power unit. Manipulates winch control lever at rear of machine to raise derrick and pulley system, and bolts trusses to truck to support derrick. Moves levers to raise and drop drill rod and bit that pounds hole in soil and rock. Pours or pumps water into well to facilitate drilling. Positions suspended bailer by hand, and operates winch control to bail sludge from well. Welds drive shoe to bottom of well-casing pipe to prevent crimping, and operates winch to lift casing into position above hole. Bolts metal block to drill rod to pound casing into bore-hole. Listens to sound of drilling machine, feels cable, and examines cuttings to determine drilling conditions and nature of rock encountered. Hooks special tools to cable to retrieve broken or lost tools from bore-hole. Mixes and pours cement to form seal between casing and bore-hole. Welds and retempers worn steel bits, or restores shape to worn carbide bits, using grinding tool. Services and makes minor repairs to drilling rig.

GED: 3 SVP: 5 PA: H 4 6 EC: O 4 5 6 DPT: 6 8 2

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 3 5	9 1	Y 0

7713-150 FOUNDATION-DRILL-OPERATOR HELPER (construction)

Helps to drill holes for building foundations:

Bolts, clamps or inserts pin to join collar and auger or bell reamer to drill stem. Observes plumb-line and reference mark on derrick or batterboard to verify alignment of drill before and during drilling operations. Measures and marks required depth of cut on drill stem, using rule and chalk. Signals to operator when drill is out of alignment and when cut reaches specified depth. Hooks cable from winch to casing, reinforcing steel, auger or bell reamer, and guides suspended equipment into hole or onto ground. Services and makes minor repairs to drill rig. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 3 PA: H 4 5 EC: O 5 DPT: 6 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 5 <u>4</u> 4 <u>3</u> 4 5	3 1	Y 2

7713-154 DRILLER HELPER, WATER WELL (mining & quarrying)

Helps to set up and operate rotary water-well drill or churn drill:

Lays planks under drilling rig stabilizers to support rig when setting up on soft ground. Couples and uncouples drill bits, sections of drill pipe and accessories, using hand or power wrenches and tongs. Guides suspended drill pipe into rotary table or storage rack by hand, and guides cable tools or well casings into bore-hole. Digs slush pit or starting hole. Shovels drill cuttings from around hole being drilled or from mud tank. Mixes drilling fluid in mud tank, or pours or pumps water into well casing to facilitate drilling. Pumps fuel from truck to drilling rig. Helps to service and make minor repairs to rig. Cuts and welds casing pipe, and welds worn cable tools. Heats cable-tool bit in tool-forging furnace, and quenches bit in water to temper steel. Mixes cement and pours into bore-hole to seal well casing. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 3 PA: H 3 4 EC: O 4 5 6 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 <u>4</u> 4 5 <u>4</u> 4 <u>3</u> 4 5	1 9 3	Y 2

7713-156 RAISE-BORING-MACHINE-OPERATOR HELPER (mining & quarrying)

Helps to operate raise-boring machine in underground mine:

Helps to build frame and to pour concrete to construct base for raise-boring machine. Scales loose rock from walls and roof of work area, installs roof bolts and timbers, and clears area of debris as safety precautions. Positions and helps to assemble machine, using hand tools. Couples, uncouples and stacks drill rods during drilling and reaming operations, using wrenches and powered hoist. Cleans and greases coupling threads on drill rods. Operates jack-leg drill to break-out reaming head after completion of reaming operation. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 3 PA: H 3 4 EC: I 4 5 6 7 DPT: 6 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 5 <u>4</u> 4 <u>3</u> 4 5	9 1 3	2 3

7713-158 CORE-DRILL-OPERATOR HELPER (construction; mining & quarrying; oil & nat. gas)

Helps to operate core-drilling equipment to obtain core samples of rock:

Helps to move drilling equipment and to assemble it at specified location. Fastens coring bit, drill rod and core-recovery device to drill, and couples water swivel to top of drill rod, using wrenches. Connects water and air hoses to drilling equipment. Attaches additional drill rods to machine, and removes and stacks rods when sample is retrieved or when hole is completed. Removes core samples from sampling device, labels samples, and places them in core box in proper sequence. Lubricates equipment and helps to make minor repairs. Scales loose rock, installs support timbers, and helps to construct wooden staging or work platform in underground work area, if required. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 2 PA: H 3 4 EC: B 5 6 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 <u>4</u> 4 5 <u>4</u> 4 <u>3</u> 4 5	3 1 9	2 3

7713-162 JACKHAMMER OPERATOR (construction; mining & quarrying)

Operates unmounted pneumatic drill (jackhammer) to bore holes in ore or rock to facilitate blasting or quarrying:

Couples compressed air and water lines to jackhammer. Inserts drill rod in chuck, and trips trigger to start hammer. Leans on jackhammer to force bit into material being drilled. Changes bits and drill rods as hole deepens. Removes chips and dirt from hole, using compressed-air blow pipe. Loads holes with explosives, and guards blast area. Operates light percussion drill supported by drill post or jack leg to bore slanting or horizontal holes, if required. Lubricates jackhammer.

GED: 2 SVP: 2 PA: H 3 4 EC: B 5 6 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 <u>4</u> 4 5 <u>4</u> 4 <u>3</u> 3 5	1 3 9	2 3

7713-166 DRILLING-MACHINE-OPERATOR HELPER (construction; mining & quarrying)

Helps to bore blasting holes for mining, quarrying or construction operations:

Signals driller to help in positioning of drilling machine and alignment of drill boom or mast. Replaces drill rods, bits, hoses or cables to aid drilling operation. Pulls water hoses and electric cable or air hose clear of machine treads or wheels. Scales loose rocks from walls and roof of underground mine and installs timber supports or roof bolts as safety precautions. Observes adjacent rock faces and operation of machine for indications of unsafe conditions. Helps to load explosives into bore-holes. Mixes drilling fluid for seismic drilling. Services and makes minor repairs to drilling machine and equipment. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 2 PA: H 4 EC: B 5 6 7 DPT: 6 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 <u>4</u> 4 5 <u>4</u> 4 <u>3</u> 4 5	3 1 9	2 3

7713-199 ROCK AND SOIL DRILLING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with rock and soil drilling, and related occupations not presently classified in Unit Group 7713.

7715-BLASTING OCCUPATIONS

This unit group includes occupations concerned with preparing, placing and detonating explosives to loosen ore, coal and other minerals in mines and quarries; to explore for minerals, oil and natural gas; and to loosen rocks and stumps and to demolish structures on construction sites.

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7715-110 BLASTER (mining & quarrying)

Assembles, positions and detonates explosives to dislodge coal, ore or rock from mine or quarry work face: Inspects blasting area to ensure observance of safety regulations. Reads instructions or diagrams to determine types and quantities of explosives and detonators required. Checks depth of bore-holes, and cleans holes, using pole, compressed air or water hose. Assembles or directs other workers to assemble primer for each hole, using appropriate detonator and explosive cartridge, and wire, fuse or detonating cord. Inserts primer into hole, and places or pours additional explosives into hole. Compacts charge with loading pole. Positions hose from portable pneumatic loader or bulk explosives truck, and operates hand control to load hole with granulated blasting agent or liquid slurry explosive. Fills collar of bore-hole with clay, sand or other material, and tamps firm to improve detonation and to confine blast. Connects wires, fuses or detonator cord into series, and tests electrical circuits with galvanometer. Directs other workers to leave blast area, and posts guards to prevent access to area. Lights fuse or connects wires to electric blasting machine, and presses handle or button to detonate blast. Assumes responsibility for general safety of assigned areas of underground coal mine. Directs and supervises drilling of blast holes in open-pit mines.

GED: 4 SVP: 7 PA: H 3 4 5 6 7 EC: B 5 6 7 DPT: 2 6 1

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 3 3 4 3 3 3 3 4	1 9	8 Y

7715-114 BLASTER (construction)

Assembles, plants and detonates explosive charges to loosen soil, rock or stumps, or to demolish structures: Examines composition, structure and location of object to be blasted. Determines quantity and type of explosives required. Marks location of holes to be drilled. Selects and arranges detonators to control and direct blast. Assembles primer charges and places with main explosive charges in drill holes or near object to be blasted. Fills collar of drill hole with mud, sand or clay, and tamps firm to improve detonation. Connects wires, detonating cord or fuses into series. Directs helpers to place safety mat over charge to suppress rock fragments during blast. Extends lead wires away from charge, and tests electrical circuits with portable galvanometer. Ensures that safety regulations have been observed, and sounds horn, whistle, or other signal for area to be cleared of workers and equipment. Connects wires to blasting machine, and pushes handle or button or lights fuse to detonate charge.

GED: 4 SVP: 6 PA: M 3 4 5 6 7 EC: O 5 6 7 DPT: 2 6 1

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 3 3 4 3 3 3 4 4	1 9	8 Y

7715-118 PERFORATOR, OIL WELL (oil & nat. gas)

Operates truck-mounted hoisting and well-logging equipment to position and detonate perforating charges to permit entry of oil or gas into well:

Reads work order and reviews well data to determine nature of perforation required. Directs and assists helper to load explosive charges into perforating gun. Drives truck into position at well site, and directs and helps to raise derrick and to assemble perforating gun and well-logging equipment. Operates switches to test electrical circuits. Inserts

detonator into gun assembly to prepare gun for firing. Operates winch controls to raise gun assembly over well head and to align casing collar locator with top of well casing. Sets up well-logging machine in truck, loads film into recorder, and activates recorder to test sensors. Operates controls to lower perforating gun assembly to pre-determined depth in well. Observes depth and weight indicators and correlates film from recorder with previously completed well logs to ensure that perforating gun is precisely positioned at required depth. Operates control to set hoist brake, and presses firing switch to detonate charges in gun. Observes instruments on control panel or receives signal from helper that charge has detonated. Raises gun assembly and dismantles or directs helper to dismantle assembly. Removes film from recorder, and makes copies of film to provide records of location of perforations. Writes record of perforating operations. Recovers core samples from walls of well, if required, using explosively-actuated core-sampling device. Services equipment and repairs instruments, using hand tools.

GED: 4 SVP: 6 PA: M 4 7 EC: B 6 7 DPT: 3 3 1

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 3 3 3 4 3 3 3 3 4	1 9	Y 8

7715-122 PIT SCALER (construction; mining & quarrying)

Blasts dangerous protrusions and scales loose rock from walls of mines or quarries, and on construction sites:

Inspects walls to determine working procedure. Hammers rock anchors or eyebolts into surface above area to be scaled, and ties ends of lifeline to safety belt and anchor or eyebolt, or directs helper to perform these duties. Operates pneumatic drill to drill blastholes into working face. Charges holes with explosives. Connects wire from charge to detonator, or connects fuse to charge. Checks electrical circuits for continuity, using galvanometer. Gives signal to clear area of workers and equipment. Depresses handle of electrical-firing device or ignites fuse to detonate charge. Scales loose rock from working face.

GED: 4 SVP: 5 PA: H 2 3 4 5 6 EC: O 6 DPT: 3 6 1

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 4 2 4 4 3 4 3 2 4	9 1	8

7715-126 SHOOTER, SEISMOGRAPH (oil & nat. gas)

Assembles and detonates explosives on land, or assembles explosives in gun when working from boat to create seismic waves to locate oil and natural gas deposits:

Drives truck to transport explosives and shooting equipment to work site. Directs and assists helper to assemble explosive charge, to connect firing wires to charge, and to lower charge into bore-hole. Tests connections and continuity of electrical firing circuit with galvanometer. Co-ordinates activities with other members of prospecting party, using two-way radio. Directs workers to guard shooting area, and checks to ensure that safety regulations are met. Connects firing wires to switch contacts on firing device in truck. Closes switch to detonate charge, or monitors radio equipment which receives detonating signal transmitted from recording truck. Directs helper to check that all charges have detonated, and to plug and fill fired holes. Monitors gauges and adjusts valves on board marine exploration vessel to fill metal cylinder (gun) with propane and oxygen. Operates controls on

board vessel to reel out gun and cable, and monitors electronic instruments during detonation of blast. Writes operational reports and takes inventory of supplies. Services and makes minor repairs to electrical and other equipment.

GED: 3 SVP: 6 PA: L 4 5 6 7 EC: B 5 6 DPT: 3 6 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 4 <u>3</u> 3 4 <u>4</u> 4 <u>4</u> 3 4	9 1	8 Y

7715-128 BLOCKHOLER (mining & quarrying)

Detonates explosives and operates drill to break up pieces of rock or ore which are too large to be loaded or to pass through chutes. Inspects oversized pieces of ore or rock to detect undetonated explosives. Operates hand-held pneumatic drill or operates controls of tractor-mounted drill to bore blasting holes in oversized pieces. Assembles explosive charges, and loads charges into bore-holes. Connects charges into series, using detonating cord or electric wires. Checks electrical circuits for continuity, using galvanometer. Guards blast area, connects wires to blasting machine, and detonates blast. Places explosives in chutes or ore passes, and detonates explosives to free blockages. Directs scoop-tram operators to dump large rocks in block-holing area and to remove fragments after blasting.

GED: 3 SVP: 5 PA: H 2 3 4 5 6 EC: B 5 6 7 DPT: 3 6 1

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 3 5 <u>4</u> 4 <u>3</u> 3 4	1 9	8 Y

7715-130 PERFORATOR HELPER (oil & nat. gas)

Helps to load, position and detonate perforating charges to permit entry of oil or gas into well:

Cleans, gauges and lubricates perforating gun, using wire brush, cloths and hand tools. Threads detonating cord through explosive charges, and positions charges in gun, using tongs. Screws caps into gun ports along gun barrel, using power tools. Drives truck to well site. Operates controls to raise and level derrick over well hole, and starts generator motor. Carries dismantled perforating gun and other equipment from truck. Assembles perforating gun and electrical-logging devices, and tests electrical circuits, using galvanometer. Operates hoist control to release cable, threads cable through pulleys, and attaches cable to perforating assembly. Guides perforating assembly by hand while it is lowered into and raised from well hole. Pulls wire line to signal to operator that perforating charges have detonated. See also definition for term title, 02-160 HELPER (any ind.).

GED: 3 SVP: 4 PA: H 3 4 EC: B 6 DPT: 6 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 3 3 5 <u>3</u> 3 <u>3</u> 4 4	1 3 9	8 Y

7715-134 BLASTER HELPER (construction; mining & quarrying)

Helps blaster to place explosives used to loosen ore, earth, stumps or rock, or to demolish structures:

Carries explosives to blasting area. Places or pours explosives into

holes as directed. Positions hose from portable pneumatic loader or bulk explosives truck to charge hole with granulated or liquid slurry explosives. Fills top of hole with mud, sand, clay or other material, and tamps it firm to improve detonation and to confine blast. Helps to position safety mat over charge to protect other workers or adjacent structures. Assists in clearing area of workers and equipment prior to blast. See also definition for term title, 02-160 HELPER (any ind.).

GED: 3 SVP: 4 PA: H 3 4 EC: O 5 6 7 DPT: 6 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 5 4 4 5 <u>4</u> 4 <u>3</u> 4 4	9 1 3	3 8 Y

7715-138 SHOOTER HELPER (oil & nat. gas)

Places explosive charges in bore-holes to assist in seismic prospecting for oil and natural gas deposits:

Carries explosives from truck. Assembles explosive charge and attaches detonator and wires. Pays out wires to lower charge, or pushes charge into bore-hole, using coupled loading poles. Pours water into hole, or shovels sand or drill cuttings into hole and tamps with loading pole to confine blast. Unreels electric cable from truck, and connects cable to wires from charges. Informs shooter when connections are completed, and guards shooting area during blast. Checks holes after firing to ensure that all charges have detonated. Fills fired holes with sand, cement or other material, and inserts plugs in holes. See also definition for term title, 02-160 HELPER (any ind.).

GED: 3 SVP: 4 PA: M 3 4 EC: O 5 6 DPT: 6 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 5 4 4 5 <u>4</u> 4 <u>3</u> 4 4	9 1 3	3 8 Y

7715-142 PIT-SCALER HELPER (construction; mining & quarrying)

Helps pit-scaler to scale or blast loose or overhanging rock from walls of mines or quarries, or on construction sites:

Hammers rock anchors or eyebolts into rock above area to be scaled. Ties lifelines to anchors or eyebolts. Moves and secures lifelines to permit pit scaler to scale or blast loose or overhanging rock. Guards area during blasting operations. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 3 PA: H 2 3 4 EC: O 6 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 4 5 <u>4</u> 4 <u>4</u> 3 5	3 1	3 8

7715-199 BLASTING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with preparing, placing and detonating explosives, and related occupations not presently classified in Unit Group 7715.

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7717-MINING AND QUARRYING: CUTTING, HANDLING AND LOADING OCCUPATIONS

This unit group includes occupations primarily concerned with operating machines to cut and remove coal, potash, ore and other minerals, and waste, overburden and similar materials in underground and open-pit mines and quarries; loading cut materials onto conveyances for removal to processing, storage or waste-depositing locations; and related support activities. Mine railway equipment and dinkey-car occupations are classified in Unit Group 9193, RAIL VEHICLE OPERATORS, EXCEPT RAIL TRANSPORT

directs other workers to remove large pieces of coal from equipment by hand. Operates winch controls to move feeder-breaker unit and control cabin back from face of tunnel, assists in removing next set of roof supports, and continues hydraulic-mining operation. Makes minor repairs to equipment.

GED: 3 SVP: 6 PA: H 3 4 8 EC: I 4 6 7 DPT: 6 6 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 5	9 1 3	2 3 8

7717-110 BUCKETWHEEL-EXCAVATOR OPERATOR (mining & quarrying)

Operates crawler-mounted bucketwheel excavator to mine oil sands in open-pit mine:

Pushes buttons to activate electric motors, and to start and stop conveyor belts, bucketwheel, and other equipment. Pushes and pulls levers to move excavator into or away from digging position, and to raise, lower and guide bucketwheel across face of cut. Adjusts switches to set speed of wheel and conveyor and rate of slew of excavator. Observes digging operations to avoid large rocks that could damage machine, and to ensure uniform excavation. Maintains communication by two-way radio to co-ordinate operations with machine operators working in close proximity. Monitors alarm panel and pressure gauges to detect malfunctions or abnormal operating conditions. Inspects and cleans excavator during non-operating periods, and reports malfunctions to oiler and mechanic. Assists mechanic in repair and maintenance of excavator. Completes log sheets on operations. Operates excavator to remove overburden prior to mining operations, if required.

GED: 3 SVP: 6 PA: M 2 3 4 8 EC: I DPT: 6 6 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 5	1 9 3	2 Y

7717-112 HYDRAULIC COAL-MONITOR OPERATOR (mining & quarrying)

Operates hydraulic coal-monitor which discharges high-pressure water jet to cut coal from underground seam:

Attaches cable from feeder-breaker unit to steel roof supports. Operates winch controls to pull feeder-breaker unit and control cabin into position near working face of mine tunnel. Removes steel roof supports and posts in front of feeder-breaker unit, using powered winch. Assists other workers to remove timber supports in front of feeder-breaker unit, using hand tools, and to pile supports and posts behind unit for removal. Assists other workers to install high-pressure water pipe. Attaches hose to valve on pipe and to controls in cabin, using wrenches. Operates winch controls to position monitor on feeder-breaker unit, and connects hoses to monitor and to controls in cabin, using wrenches. Assists other workers to position and nail barrier boards which direct water and coal into feeder-breaker unit. Operates winch to lower pan which funnels broken coal and water from feeder-breaker unit into flume, and guides pan into position by hand. Assists other workers to nail nets into position in front of control cabin to prevent coal fragments from hitting workers during operation of monitor. Telephones surface to request workers to start high-pressure water flow. Adjusts valves and checks pipes for leaks. Operates hand controls in cabin to release water jet from monitor and to control traverse and elevation of monitor to break coal from seam. Assists or

7717-116 POWER-SHOVEL OPERATOR (construction; mining & quarrying)

Operates power shovel to excavate overburden or blast-loosened rock, ore or other material from open-pit mine, strip mine, quarry or construction pit:

Operates hand and foot controls to swing, lower and raise shovel to scoop up dirt, ore or rock. Moves controls to dump overburden into void left by preceding strip, or to load overburden, rock or ore into trucks. Pushes button or lever to sound whistle or horn which signals truck drivers when trucks are fully loaded. Operates power shovel to move oversized rock fragments into position for secondary blasting, and to sort ore from waste rock. Operates power shovel to make rough grades in blasted rock for roads, to dig trenches, to lift and carry heavy equipment, and to perform related duties. Services power shovel and makes minor repairs.

GED: 3 SVP: 6 PA: M 4 8 EC: I 5 DPT: 6 6 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 5	1 9 3	2 Y

7717-118 CONTINUOUS-MINING-MACHINE OPERATOR (mining & quarrying)

Operates self-propelled continuous-mining machine to mine coal, potash and other materials from working face of underground mine:

Pushes and pulls levers to position mining machine with ripper bar or boring head at working face. Pushes and pulls control levers to start machine and to cut, gather and transfer material to conveyor, floor, storage bins, or haulage car. Adjusts level and position of conveyor discharge at rear of machine, using hand tools and machine controls. Adjusts levers to control height and direction of cut and to co-ordinate pace of mining with speed of conveyor or capacity of haulage car. Clears or directs other workers to clear jammed material from machine, using sledgehammer and shovel. Monitors gauges and control lights and inspects cutting teeth to ensure efficient operation of machine. Services machine and makes minor repairs. Scales walls, installs timbers or roof bolts, and performs related duties to maintain safety and continuity of mining operations.

GED: 3 SVP: 6 PA: M 3 4 8 EC: I 5 6 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 5	1 3 9	2 8 Y

7717-120 LONGWALL COAL-SHEARER OPERATOR (mining & quarrying)

Operates longwall coal shearer in underground mine:

Adjusts hand controls to govern speed at which shearer moves along longwall coal face. Adjusts controls to govern rotary speed and height of shearer drums which cut coal from longwall face and load coal onto face conveyor. Services equipment and performs minor repairs. Helps other workers to move roof supports and face conveyor, if required.

GED: 3 SVP: 6 PA: M 3 4 8 EC: I 5 6 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 <u>3</u> 4 5 <u>3</u> 4 4 <u>4</u> 5	9 1 3	2 8

7717-122 CUTTING-MACHINE OPERATOR (mining & quarrying)

Operates electric-powered cutting machine to cut channels in working face of underground mine to facilitate removal of minerals or coal from seam:

Drives cutting machine mounted on tracks or crawler treads into position at working face. Moves levers to activate continuous chain equipped with teeth that travel around edge of cutter-bar and cut into working face. Moves levers to advance cutter-bar into face and across top or bottom and down sides of face to complete horizontal and vertical cuts. Moves levers to control angle and depth of penetration of cutter-bar. Operates drill attachments of cutting machine to drill blast holes in working face. Services machine and makes minor repairs. Scales walls, installs timbers or roof bolts, and performs related duties to maintain safety and continuity of mining operations.

GED: 3 SVP: 6 PA: M 4 8 EC: I 5 6 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	9 1 3	2 3 Y 8

7717-124 EXTENSIBLE CONVEYOR-BELT ASSEMBLER (mining & quarrying)

Installs, lengthens and dismantles extensible conveyor-belt system to facilitate transfer of potash or other mineral from continuous-mining machine to mainline conveyor or other disposal point:

Operates electric drill to bore post holes at regular intervals in tunnel floor and inserts posts into holes by hand, or positions stands on floor at regular intervals. Fits idler rollers onto posts or stands to support belt which is released from conveyor tail unit hitched to continuous-mining machine. Aligns idlers and belt, using hand tools. Pulls lever to activate hydraulic clamps which hold belt, and removes and adds pins by hand to add extra belt sections to allow further advance of conveyor. Drives front-end loader or other vehicle to transport posts, idlers and additional belt sections to required location. Shovels spilled ore onto conveyor belt. Dismantles conveyor system on completion of mining operation in each area of mine. Helps other workers to construct brattices of wood and fabric or plastic, to erect roof support pillars, to install roof bolts, and to perform related duties to facilitate continuous-mining operations. Operates hydraulic controls of self-contained extensible conveyor belt, if required.

GED: 3 SVP: 5 PA: H 4 8 EC: I 5 6 7 DPT: 6 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 5 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	3 1 9	2 9 8

7717-126 QUARRY WORKER (mining & quarrying)

Separates blocks of rough dimension-stone from quarry rock formation:

Marks desired dimensions on rock, using rule and chalk. Operates jackhammer to drill holes along marked outline. Inserts wedges and feathers into holes and drives wedges and feathers with sledgehammer to split rock, or operates jackhammer to split rock. Pushes and pulls levers to raise or lower circular blade of stone saw and to advance saw along tracks to cut blocks from limestone or other soft formation. Removes irregularities from sides of blocks, using jackhammer, chisel, sledgehammer or other tools. Operates power drill to bore holes into sides of block or slab, and inserts dogs or attaches sling and hoisting cable for removal of stone from quarry. Assembles, plants, and detonates explosive charges to loosen or split rock from formation, if required.

GED: 3 SVP: 4 PA: H 3 4 EC: O 5 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 <u>4</u> 4 5 <u>4</u> 4 <u>4</u> 4 5	3 1 9	2 3

7717-130 AERIAL-TRAM OPERATOR (mining & quarrying)

Operates aerial tramway consisting of buckets supported by cables, pulleys and towers to convey ore, coal or other material from plant or mine to boat, railway car, spoil pile or plant:

Pushes buttons to start reel and winding cable to move tram buckets between loading and dumping areas. Pulls lever to position buckets for loading. Pushes buttons to dump load, or monitors signal panel to confirm that buckets are dumped automatically by tipping device. Listens and watches for malfunction of tramway and automatic dumping equipment. Talks to workers at dumping station by telephone to ensure that load is fully dumped in proper location. Removes and replaces buckets during operation of tram, and ensures that buckets are properly spaced on tramway. Services machinery and makes minor repairs.

GED: 3 SVP: 4 PA: L 4 EC: B DPT: 6 6 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 <u>4</u> 5 <u>4</u> 4 <u>4</u> 5 5	3 9 1	2 Y 3

7717-134 SLUSHER OPERATOR (mining & quarrying)

Operates slusher (powered winch and cable-drawn scraper blade) to scrape ore or rock from working face or drawpoint to disposal point in underground mine:

Removes loose rock from walls and roof of work area, using scaling bar. Operates portable rock drill to bore holes in walls, and installs eye-bolts and pulleys, using hand and power tools. Chains winch to eye-bolts and threads slusher cable through pulleys from winch drum to scraper blade. Couples electric cables or compressed-air hose to winch. Pushes or pulls winch control levers to drag scraper blade from

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pile of broken rock or ore to chute, mine car, conveyor, or other disposal point, and to return blade to pile. Services equipment and makes minor repairs.

GED: 3 SVP: 4 PA: H 3 4 7 EC: I 5 6 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 4 5	3 9 1	2 Y 8

7717-138 BELTWAGON OPERATOR (mining & quarrying)

Operates beltwagon to transfer oil sands from bucketwheel excavating machine to conveyor leading to extraction plant:

Turns switches and pushes buttons to start beltwagon, to drive it into transfer position, and to move cable-reel car. Operates levers to raise, lower and rotate beltwagon conveyor booms to direct flow of oil sands from discharge of bucketwheel excavator to plant conveyor. Adjusts controls to start and control speed of conveyor belt and to realign receiving and discharge conveyors of beltwagon as excavator advances. Monitors alarm panel and pressure gauges to detect malfunctions or abnormal operating conditions. Communicates with other machine operators by two-way radio to co-ordinate operations. Services machine and makes minor repairs.

GED: 3 SVP: 4 PA: L 4 EC: I DPT: 6 6 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 5 <u>4</u> 4 <u>3</u> 4 5	1 9 3	2 3 Y

7717-142 BOOM-CONVEYOR OPERATOR (mining & quarrying)

Operates boom conveyor at surface of mine to move coal, ore, or other materials between railway cars, bins, or conveyor system and stockpiles:

Operates controls to drive boom conveyor to desired location and to adjust height, swing and extension of boom to position boom over stockpile or car. Operates controls to start conveyor belts and to transfer material to and from stockpile. Monitors gauges and lights on control panel to detect malfunctions in operation of conveyor system. Observes conveyor to detect foreign materials, and stops conveyor to prevent damage and to allow for removal of materials by other workers. Services equipment and makes minor repairs.

GED: 3 SVP: 4 PA: L 4 8 EC: B 5 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 4 <u>4</u> <u>3</u> 4 4	3 9 1	2 Y

7717-146 LOADING-MACHINE OPERATOR (mining & quarrying)

Operates mobile electric loading machine equipped with gathering arms and conveyor to load shattered ore, rock, coal, potash or other materials into vehicles in underground mine:

Operates hand controls to drive loading machine into pile of material blasted from working face or dumped on floor by continuous-mining machine. Moves levers to position conveyor boom and to start conveyor and gathering-arm motors. Operates controls to gather and

convey material into mine vehicles and to regulate conveyor speed. Removes foreign material from conveyors. Services machine and makes minor repairs. Scales walls, installs timbers or roof bolts, and performs related duties to maintain safety and continuity of mining operations.

GED: 3 SVP: 4 PA: M 4 8 EC: I 5 6 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	9 1 3	2 3 8 Y

7717-150 CAGE ATTENDANT (mining & quarrying)

Loads and unloads mine cage with mine cars, supplies and equipment, and transports mine cars, supplies, equipment and workers in cage to various levels of underground mine:

Pushes or pulls mine cars into mine cage, unloads mine cars, and loads and unloads supplies and equipment at various levels of mine. Operates powered winch, fork-lift, truck or other machinery to load or unload heavy cars and equipment. Ensures that workers being transported to and from underground levels conform to safety regulations. Pushes switches which activate buzzer or bell and light system to signal hoist operator to raise or lower cage to required level, or pushes buttons to operate automatic hoist. Assists in attaching and removing long pieces of equipment beneath cage. Directs loading of cage with special materials such as explosives to enforce safety standards. Reports number of mine cars hoisted daily. Cleans cage and level station. Reports on condition of shaft and equipment.

GED: 3 SVP: 4 PA: H 3 4 EC: I 5 6 7 DPT: 6 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>3</u> 4 4 <u>4</u> <u>3</u> 4 5	1 3 9	2 3 Y

7717-152 CONVEYOR-BELT PATROLLER (mining & quarrying)

Patrols conveyor belt used to transport oil sands from open-pit mine to extraction plant to ensure safe and efficient operation of belt:

Patrols assigned section of conveyor belt on foot, and observes operation of conveyor belt from watch house. Pulls emergency cord to stop conveyor when large rocks appear on belt, or when broken rollers, torn belts or other malfunctions occur. Climbs onto conveyor belt and removes rocks. Notifies mine dispatcher and machine operators of shut-downs and start-ups, using two-way radio. Examines condition of rollers, belts, gear boxes, tail pulleys, travelling scrapers and water sprayers. Reports malfunctions or damaged parts to maintenance crew. Operates front-end loader or uses shovel or rake to remove spillage from around conveyor and tail pulleys. Services drive motors and makes minor repairs to conveyor system.

GED: 3 SVP: 3 PA: H 2 3 4 EC: B 6 7 DPT: 6 6 5

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 5 <u>4</u> 4 <u>4</u> 5	9 1 3	2 9

7717-154 MECHANICAL-SHOVEL OPERATOR (mining & quarrying)

Operates mechanical shovel that loads ore-bearing rocks into mine cars or onto conveyor in underground mine:

Drives rail-mounted, rubber-tired or crawler-tread machine to work area. Inspects work area and scales loose rock, installs roof bolts, wire mesh or timbers, and washes down broken rock with water hose as safety precautions. Couples machine to power lines. Moves control levers to force scoop of machine into pile and to lift scoop overhead or to one side. Moves levers to dump contents of scoop into mine car or onto conveyor. Signals other workers to position mine cars and to operate rail switches. Services machine and makes minor repairs.

GED: 2 SVP: 4 PA: M 4 8 EC: I 5 6 7 DPT: 6 6 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 4 <u>3</u> 4 <u>3</u> 5	3 9 1	2 Y 8

7717-156 SCOOP-TRAM OPERATOR (mining & quarrying)

Operates scoop-tram to load, haul and dump ore, waste and rock in underground mine:

Pushes and pulls levers and depresses pedals to drive scoop-tram to muck pile in mine tunnel or drift, or at mine face. Operates controls to raise and tilt bucket, to scoop materials into bucket, to reverse machine, and to dump load onto conveyor belt, into chute, truck or similar receptacle, or onto ground outside mine. Operates controls to transport materials, supplies and equipment in bucket to and from mining area. Operates controls to tow or push heavy equipment. Operates controls to sort and separate oversized materials and scraps with bucket, to level and grade road surfaces in mine tunnels, and to perform related duties. Hoses down muck pile. Services scoop-tram and makes minor repairs. Scales walls, installs timbers or roof bolts, and performs related duties to maintain safety and continuity of mining operations.

GED: 2 SVP: 3 PA: L 4 8 EC: I 5 6 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 <u>4</u> 4 5 <u>4</u> 4 <u>4</u> 5	3 1 9	2 8

7717-158 PEAT MOSS-CUTTING-MACHINE OPERATOR (mining & quarrying)

Operates peat moss-cutting machine in peat bog to cut and stack blocks of peat moss:

Drives cutting machine to work area and aligns machine to cutting face. Operates machine controls to cut into face of peat bog, to cut out peat blocks, and to stack them at side of machine. Observes cutting and stacking operations, and stops machine to clear stoppages or to remove foreign materials, such as tree branches. Services machine and makes minor repairs.

GED: 2 SVP: 3 PA: L 4 EC: O 5 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 5	9 3 1	2 3

7717-162 PEAT MOSS-GATHERING-MACHINE OPERATOR (mining & quarrying)

Operates peat moss-gathering machine to pick up peat moss from surface of peat bog:

Hitches peat moss-gathering machine to tractor, secures power-take-off, and connects controls from tractor to peat moss-gathering machine. Drives over designated area and operates machine's vacuum pick-up to lift dried peat moss from surface of bog and to deposit it in machine hopper. Delivers peat moss to processing plant or storage area. Operates machine controls to dump contents of hopper. Services machine and makes minor repairs.

GED: 2 SVP: 2 PA: M 4 EC: O 5 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 5	9 3 1	2 3

7717-166 CHUTE LOADER (mining & quarrying)

Tends equipment that regulates flow of broken coal, rock or ore down chutes to lower level in mine, into skips, trucks or rail cars, or onto conveyors:

Pushes or pulls levers to open chute gates and to control flow of coal, ore or rock down chute to loading bin, conveyor or crusher. Clears blockages in chute, using metal bar or explosive charge. Operates winch controls to position mine or railway cars under loading bin. Operates hand control to release contents of loading bin onto conveyor or into hoist skip, mine car, railway car, or truck. Removes scrap metal, timber or other foreign material from ore. Shovels spilled rock and ore from work area. Operates hand control to dispatch loaded skip to surface or to signal hoist operator to raise skip. Records number of skips or cars loaded. Services equipment and makes minor repairs.

GED: 2 SVP: 2 PA: M 4 EC: I 5 6 7 DPT: 6 8 5

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 4 5 <u>4</u> 4 <u>4</u> 5	3 1	2 3 8

7717-170 COBBER (mining & quarrying)

Crushes asbestos-bearing rock with cobber hammer, and removes asbestos fibres from rock:

Removes pieces of high-grade asbestos-bearing rock from working face after blasting operations, using cobber hammer. Fills sacks with rocks and carries them to cobbing shed. Empties rocks onto work bench, and crushes them with lightweight cobber hammer. Removes asbestos fibres from rock, and places them in trays according to length.

GED: 2 SVP: 2 PA: VH 3 4 EC: B 5 6 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 5 <u>4</u> 4 <u>4</u> 4	1 3	2 3

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7717-199 MINING AND QUARRYING: CUTTING, HANDLING AND LOADING OCCUPATIONS, N.E.C.

This group includes occupations in mining and quarrying, not elsewhere classified, primarily concerned with operating machines to cut and load minerals, waste and similar materials, and related occupations not presently classified in Unit Group 7717.

wedges and bars. Attaches hoisting cables or slings to slabs for loading onto vehicles or for hoisting from quarry. Shovels debris into wheelbarrow, and removes debris from work areas. Helps to lift and move power cables during power-shovel moves in crushed-rock quarry. Unloads drilling and blasting supplies, and carries them to work area. Pulls levers to open and close chutes from rock crusher to load trucks with crushed rock.

GED: 2 SVP: 2 PA: H 3 4 EC: O 5 6 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 4 5 <u>4</u> 4 <u>3</u> 4 5	3 1	2 3

7718-122 ROCK DUSTER (mining & quarrying)

Sprays rock dust in tunnels and working areas of underground coal mine to reduce possibility of coal-dust explosion: Dumps rock dust from bags into hopper of compressed-air-operated spray machine or portable handsprayer. Couples compressed-air hose and water hose to spray machine. Turns valves to mix rock dust with water. Adjusts nozzle control of spray machine or pushes handle of handsprayer to spray dust and water onto walls, roof and floor of mine tunnels and working areas.

GED: 1 SVP: 2 PA: M 3 4 EC: I 4 6 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 5 5 4 4 5 <u>4</u> 4 <u>4</u> 4 5	3 1	2 3

7718-126 SLATE PICKER (mining & quarrying)

Removes waste rock and other foreign matter from coal conveyor: Removes slate, rock, wood, scrap metal or other objects from coal on moving conveyor belt. Throws impurities into chute or wheelbarrow for disposal as waste. Throws salvageable material into bins for further processing. Shovels spillage back onto conveyor. Pushes buttons, turns switches, or pulls cable to stop conveyor, and removes rock and other oversized impurities. Breaks oversized coal, using bar, jackhammer or sledgehammer. Assists in freeing blocked chutes, screens, grizzly or crusher, using bars and hammers.

GED: 1 SVP: 2 PA: M 3 4 7 EC: B 5 6 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 5 5 4 4 5 <u>4</u> <u>4</u> <u>3</u> 4 4	3 1	2 3

7718-130 TIMBER AND STEEL-PROP SETTER HELPER (mining & quarrying)

Helps to erect wood and steel supports in underground mine: Carries materials, supplies and equipment to work area. Places and holds posts, headers, cap-pieces and other timbers in position for sawing and notching. Measures, saws, hews and nails timber supports, hammers wedges into position, and bores holes in rock for anchor bolts, using hand and power tools. Helps to install props, arches, girders and other steel supports. Helps to construct wood chutes and other structures, to install burlap to prepare area for back-fill, and to mix and pour concrete. Helps to install rock bolts and wire-mesh

7718-110 LABOURER, GENERAL, MINE (mining & quarrying)

Performs general labouring duties in underground or open-pit mine: Cleans working areas and haulage tracks, using pick, shovel, bar and other hand tools. Digs and maintains drainage ditches. Loads and unloads supplies, and carries supplies to and from mine cars on surface or underground. Trims protrusions and scales loose rocks from walls and roofs of underground areas, using scaling bar. Cleans residue of rock and dirt from exposed ore, coal or rock formations, using pick, shovel and water hose. Sorts ore, coal, rock and other materials, and shovels them into cars, buckets, conveyors or wheelbarrows. Pushes mine cars from working face to pickup area, and couples cars together. Helps to rerail cars and trams, using jacks, bars and blocks. Shovels refuse out of mine or railroad cars, and scrapes or flushes sides and bottom of cars. Throws calcium or salt or sprays fish oil around interior of car to prevent ore or coal from freezing to cars during winter. Helps to lift and move electric power cables during power-shovel moves in open-pit mine or strip mine. Cleans lunchroom and lavatory facilities, and performs other general labouring duties.

GED: 2 SVP: 2 PA: H 3 4 EC: B 6 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 4 5 <u>4</u> 4 <u>3</u> 4 5	1 3	2 3

7718-114 LABOURER, GENERAL, QUARRY (mining & quarrying)

Performs general labouring duties in dimension-stone or crushed-rock quarry: Removes mud and muck from surface of stone to facilitate breaking, using pick, shovel and water hose. Loosens pieces of blasted stone and chips irregularities from stone slab, using picks, sledgehammers,

screening to support roof and walls. See also definition for term title, 02-160 HELPER (any ind.).

GED: 1 SVP: 2 PA: H 2 3 4 EC: I 5 6 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 5 4 4 5 <u>4</u> 4 <u>3</u> 4 5	3 1	2 3

7718-134 PEAT-MOSS GATHERER, HYDRAULIC (mining & quarrying)

Directs high-pressure stream of water against bank of peat bog to harvest peat moss:

Moves handle on nozzle to direct stream of water against bank of bog to mix water and peat into slurry, and to force slurry into tank for pumping to processing plant. Pulls skids on which nozzle and hose are mounted to new location on bog.

GED: 1 SVP: 2 PA: L 4 EC: O 4 DPT: 8 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 5 5 4 4 5 <u>4</u> 4 <u>4</u> 4 5	3 1	2 3

7718-142 GRIZZLY WORKER (mining & quarrying)

Frees ore and rock stoppages at grizzly (iron grating), and breaks up oversized pieces of ore and rock in underground mine:

Prods rock or ore to keep it moving through grizzly and chute leading to crusher, storage, conveyors, or loading station at lower level of underground mine, using bar, pick or shovel. Removes timber, steel and other foreign materials from rock or ore. Operates control levers of boom-mounted pneumatic hammer to position hammer and to break large chunks of rock or ore, or operates portable pneumatic hammer or uses sledgehammer to break rock or ore.

GED: 1 SVP: 2 PA: H 2 3 4 EC: I 5 6 7 DPT: 8 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 5 5 4 4 5 <u>4</u> 4 <u>4</u> 5	3 1	2 3

7718-146 PEAT-MOSS CUTTER, HAND (mining & quarrying)

Cuts and stacks blocks of peat moss in peat bog:

Cuts blocks of peat moss from vertical face of trench, removes blocks, and lifts them to surface, using spade. Stacks blocks of peat moss. Sharpens spade, using file.

GED: 1 SVP: 1 PA: H 4 EC: O 4 DPT: 8 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 5 5 4 4 5 <u>4</u> 4 <u>4</u> 5	3 1	2 3

7718-199 LABOURERS AND OTHER ELEMENTAL WORKERS, MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, as described under term title, 02-190 LABOURER/ELEMENTAL WORKER (any ind.), in mining and quarrying including oil and gas fields, and related occupations not presently classified in Unit Group 7718.

7719-OTHER MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCUPATIONS

This unit group includes other occupations in mining and quarrying, including oil and gas fields, concerned with inspecting and testing work as described under term titles, 02-170 INSPECTOR (any ind.) and 02-430 TESTER (any ind.), engaged in quality control and in enforcing safety regulations. This unit group also includes occupations concerned with mining and related support activities; prospecting for water; tending brine wells; back-filling; and assisting with gravity and seismic prospecting.

Inspecting, Testing, Grading and Sampling Occupations

Mining and Quarrying, Oil and Natural Gas

7719-110 through 7719-134

7719-110 OIL-PIPE INSPECTOR (oil & nat. gas)

Inspects drill pipe, well-casing, and other oil-well pipes to determine location, nature and extent of defects: Connects electrical cables to power source, sensing equipment, and control console, using hand tools. Directs other workers to clean pipe and to position pipe or sensing equipment in preparation for testing. Positions magnetic scanner around pipe, and connects wire to automatic graph recorder. Presses buttons or switches on control console to move self-propelled scanner along length of pipe, or to move pipe through magnetic or gamma-ray testing equipment. Analyzes chart recordings of magnetic characteristics or gamma-ray scattering to determine location, nature and extent of defects, and thickness of pipe. Inserts magnetic poles into ends of pipe, and sprinkles magnetic powder on magnetized pipe to reveal defects in pipe. Inspects interior of pipes for surface imperfections, using optical instruments. Measures hardness and thickness of pipes, using portable hardness testers, calipers, or ultrasonic measuring devices. Marks inspected pipes according to established code for recommended usage, using paint brush or centre punch and hammer. Reports results of inspection to engineering personnel or customer.

GED: 4 SVP: 6 PA: M 3 4 7 EC: B 6 DPT: 2 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
<u>3</u> <u>3</u> <u>3</u> <u>3</u> <u>4</u> <u>3</u> <u>4</u> <u>4</u> <u>5</u> <u>4</u>	9 7 1	9 0 Y

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7719-112 SAFETY INSPECTOR, MINES (mining & quarrying)

Inspects underground or open-pit mines to detect violations of provincial or company safety and mining regulations:

Inspects mines to detect fire hazards, defective or incorrectly placed timbers, metal supports and framework, defective electrical or mechanical equipment, and improper storage of explosives. Examines wall and roof surfaces for evidence of loose or dangerous rock conditions. Tests air to detect concentrations of toxic gases and explosive dusts, using methane detector, carbon monoxide register, carbon dioxide chemical meter, and anemometer. Recommends alteration or installation of ventilation shafts, partitions or equipment to rectify inadequate air-conditioning. Inspects fire-fighting and rescue equipment. Investigates explosions, fires and accidents, reports causes, and recommends procedures to correct unsafe practices. Notifies management of violations of regulations. Instructs mine workers in safe working practices, and promotes safety-mindedness of workers. Prepares records of inspections, accident statistics, and other data.

GED: 4 SVP: 6 PA: L 2 3 4 5 6 7 EC: I 6 7 DPT: 2 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 4 4 3 3 4 4 4 4 4 4	9 1	9 0 Y

7719-114 FIRE BOSS (mining & quarrying)

Inspects underground mines to detect fire hazards, toxic gases, and inadequate ventilation:

Patrols shafts, haulage ways, and working areas of underground mine. Checks for presence of gas, using safety lamp, methane detector and other gas detectors. Checks atmospheric conditions to ensure adequate ventilation, using anemometer. Opens and closes doors to provide adequate ventilation. Reports evidence of fires, fire hazards, defective ventilation partitions and doors, and abnormal atmospheric conditions. Inspects fire-fighting equipment and fire escapes to ensure safe and efficient operation. Refills fire extinguishers, and makes minor repairs to fire-fighting equipment. Instructs workers in use of air masks, and participates in fire and safety drills and meetings. Administers first aid to injured workers.

GED: 3 SVP: 6 PA: L 2 3 4 EC: I 6 7 DPT: 3 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 4 3 3 4 4 4 4 4 4	1 3 9	9 0 Y

7719-118 COAL INSPECTOR (mining & quarrying)

Inspects coal at surface of mine to detect impurities, and collects coal samples from underground or open-pit mine, rail cars, and cargo shipments for laboratory analysis:

Inspects coal being loaded into rail cars at surface of mine to ensure that coal is free from stones and other impurities. Rejects cars containing dirty or impure coal, and reports findings to superior. Collects coal samples from underground or open-pit mine, rail cars, and cargo shipments. Packs coal samples, marks them with record of source, and forwards samples to laboratory for analysis. Assists in grinding, mixing and weighing of samples to prepare them for analysis, if required.

GED: 3 SVP: 6 PA: M 4 EC: B 7 DPT: 3 6 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 3 4 4 3 4 4 4 4 5 4	1 3	9 0 Y

7719-120 GAS TESTER (oil & nat. gas)

Operates mobile gas-testing equipment to obtain samples for laboratory evaluation of flow potential of oil or natural gas wells:

Drives truck carrying testing equipment and supplies to well site. Positions and connects or directs other workers to position and connect pipes between well-head and testing equipment, using wrenches. Opens valves to allow well fluid to flow into testing equipment. Monitors gauges, and operates controls of testing equipment to heat well fluid, to separate fluid into its component phases, and to store test products in tanks. Returns sample tanks and automatically-recorded graphs of flow rate, pressure and temperature of well fluid for laboratory and computer analysis. Services equipment and makes minor repairs.

GED: 3 SVP: 5 PA: M 3 4 EC: O 7 DPT: 3 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 4 4 4 4 4 4 5	1 9	0 Y

7719-126 PIPE TESTER (oil & nat. gas)

Operates truck-mounted pumping equipment to test oil-well pipes for high-pressure leaks or fractures:

Attaches wire line pulley to crown block of rig, and connects hose to testing tool, pump, and water source, using hand tools. Operates hydraulic winch to lower testing tool and high-pressure packing devices into pipe to seal water in designated section. Moves lever on hydraulic pump to fill pipe section with water under specified pressure. Observes gauge to detect leaks and changes in pressure. Records findings on log sheet and prepares operational reports. Services equipment and makes minor repairs.

GED: 3 SVP: 5 PA: M 2 3 4 EC: O DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 3 3 4 4 4 4 4 5	9 1	0 Y

7719-130 SAMPLE WASHER (oil & nat. gas)

Washes, dries and pulverizes gas or oil-well samples (cuttings and cores) to prepare them for laboratory analysis:

Sprays water through various-sized screens over gas or oil-well samples to separate foreign matter from samples. Transfers samples to drying oven. Operates small power crusher or uses hammer to grind or pulverize samples. Labels and files samples for laboratory analysis. Places containers loaded with samples on conveyor belt of automatic washing and drying machine, if required.

GED: 2 SVP: 2 PA: L 4 EC: I 4 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 4 4 3 4 5	1 3	2 3

7719-134 CORE SPLITTER (mining & quarrying)

Splits core samples removed from diamond core drill:

Positions core on saw rack, in screw press, or in core holder. Operates circular stone saw, turns lever of screw press, or uses hammer and chisel to split core. Places half of core in sample box, labels core, and forwards sample to laboratory for analysis. Places other half of core in core box, labels core, and stores sample for future reference.

GED: 2 SVP: 2 PA: M 4 EC: I 6 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C		
4 4 4 4 4 4 <u>4</u> 4 4 5 5	1 3	2 3

Miners and Support Workers
7719-146 through 7719-192

7719-146 SHAFT MINER (construction; mining & quarrying)

Drills and blasts rock to construct ventilation or hoisting shafts for underground mines, or for construction projects such as subways, waterways or roadways:

Operates portable pneumatic plugger drill or operates hand controls of suspended jumbo drill to bore holes in floor of shaft in specified position and direction. Loads drilling equipment into hoisting bucket or suspends equipment from bucket, and operates hand control to signal hoist operator to raise bucket. Primes explosive cartridges with appropriate detonators, and charges bore-holes with explosives. Connects detonator cord or wire into series, tests circuits for continuity, using galvanometer, and attaches wires to blasting cable which extends to surface of mine. Clears shaft of workers, ascends to surface of mine in hoisting bucket, and pushes handle or button of detonator to fire explosives. Starts ventilation fan, allows sufficient time for fumes to be cleared from shaft, and descends in hoisting bucket. Scales loose rock from walls of shaft, and operates portable drill to drill holes in walls and to install rock bolts and wire mesh. Pushes and pulls controls of suspended loading shovel to fill hoist bucket with broken rock. Hooks hoist cable to bucket, signals hoist operator, and steadies bucket as it is raised from shaft floor. Positions steel reinforcing rods between suspended form and shaft walls, and pours concrete around reinforcing rods. Aligns and installs steel structural members, hoist guides, air, water, pump and ventilation pipes, and manway ladders in completed shaft sections according to specifications, using plumb line, tape measure, and hand and power tools. Drills and blasts rock to excavate shaft stations, loading pockets or other openings at specified levels in shaft.

GED: 3 SVP: 6 PA: VH 2 3 4 8 EC: B 5 6 7 DPT: 6 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 3 5	1 9	Y 0 1 8

7719-148 RAISE MINER (mining & quarrying)

Drills and blasts rock to construct vertical or steeply-inclined openings (raises) from a lower level upwards in underground mine:

Climbs ladders to reach face of raise and carries equipment and supplies, or operates hand controls of tugger hoist to raise or lower equipment and supplies. Scales loose rock from walls and face of raise, using scaling bar. Sprays face of raise with water to remove dust and

to search for unexploded charges. Installs work staging, and builds up support timbers, cribbing, compartment or chute linings, steel hoisting box, manway ladders, platforms, and other structures, using hand and power tools. Operates portable drill to bore holes in wall, and installs rock bolts, hangers, and extensions for compressed air, water, and ventilation pipes. Operates portable stoper drill to bore blasting holes in face of raise in specified position and direction. Operates hoist controls to lower drilling equipment from face of raise to lower level, or stows equipment near face and carries explosives to face. Primes explosive cartridges with appropriate detonators, and charges bore-holes with explosives. Connects detonator cord or wire into series, and checks continuity of circuits with galvanometer. Climbs down ladder from raise, posts guards, and pushes button or handle of detonator to fire blast. Pushes or pulls lever to open chute control gate to draw broken rock from muck compartment of raise. Installs and operates slusher hoist, if required, to scrape broken rock from chute to disposal point. Operates drill and blasts rock to widen top of raise after breaking through to higher level, and to start lateral tunnels at specified positions in raise. Installs rails for rail-mounted raise-climbing machine, operates raise-climbing machine to drill bore-holes, and charges bore-holes, if required. Services equipment and makes minor repairs.

GED: 3 SVP: 6 PA: VH 2 3 4 8 EC: I 4 5 6 7 DPT: 6 8 2

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 3 5	1 9	Y 0 1 8

7719-150 DRIFT MINER (construction; mining & quarrying)

Drills, blasts, and operates equipment to remove rock to construct tunnels for development of underground mine, or for construction projects such as subways, waterways or roadways:

Scales loose rock from walls and roof of tunnel heading, using scaling bar. Operates portable stoper drill to bore holes in roof and to install roof bolts and wire mesh. Installs timber or steel roof supports, using hand and power tools. Carries portable jack-leg drill or drives drilling machine into position at working face. Operates drill to bore round of blasting holes in specified position and direction. Carries or drives drilling equipment away from face, and carries explosives to face. Primes explosive cartridges and inserts cartridges in bore-hole, or operates controls of portable powder blower to charge bore-holes. Connects detonator cord, wire, or fuses into series, and tests continuity of circuit with galvanometer. Clears area of workers and posts guards. Lights fuse or pushes handle or button of detonator to fire blast. Starts fan or opens valves to ventilate area after blast, and sprays broken rock with water. Operates hand and foot controls of scoop tram, mechanical loader, locomotive, slusher hoist, or other equipment to load and remove broken rock. Installs pipes for compressed air, water, ventilation, and other service lines, and extends rail tracks, using portable drill and hand and power tools. Services equipment and makes minor repairs.

GED: 3 SVP: 6 PA: VH 2 3 4 8 EC: I 4 5 6 7 DPT: 6 8 2

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 3 5	1 9	Y 0 1 8

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7719-152 COAL OR SOFT ROCK MINER (mining & quarrying)

Mines coal or soft rock in areas inaccessible to high-production equipment, and performs a variety of duties to support continuous-mining machine, hydraulic-coal monitor, or longwall-shearing-machine operations in underground mine:

Operates pneumatic or electric drill to bore blasting holes in walls and roof of working area. Removes dust from bore-holes, using compressed-air hose. Helps to assemble primers, to charge blasting holes with explosives, and to stem holes with clay, rock dust, or other inert material. Removes loose coal or rock from roof, walls and floor of work area after blast, using scaling bar or pick. Shovels loose material into mine cars or onto conveyor. Measures, cuts, and installs supporting timbers, wedges, steel props, and arches, using hand and power tools. Operates stoper drill or roof-bolting machine to bore holes in roof and to install roof bolts. Sprays rock dust over surfaces of roadways and working areas to reduce possibility of coal dust explosion, using compressed-air hose. Installs and adds sections of ventilation ducting, water and compressed-air pipes, electricity lines, coal flume, conveyor belt, or railway line as working face advances, using hand and power tools. Helps to set up hydraulic coal-mining monitor unit and equipment, and to remove supports, pipes and other equipment as hydraulic-mining operation progresses. Operates portable auger drill to recover coal samples from walls of tunnel.

GED: 3 SVP: 5 PA: VH 2 3 4 8 EC: I 4 5 6 7 DPT: 6 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 5	1 9	Y 0 1 8

7719-156 HARDROCK MINER (mining & quarrying)

Operates portable drills, places and detonates explosives, and performs related duties to mine ore in underground mine:

Scales loose rock from walls and roof of work area, using scaling bar. Sprays walls and roof with water to remove dust and to search for unexploded charges. Positions portable stoper drill, and operates drill to bore holes in roof and to install roof bolts and wire mesh. Installs timber roof supports, using hand and power tools. Carries jack-leg drill to work area, and operates drill to bore blasting holes in specified position and direction. Removes drilling equipment, and carries explosives to working face. Primes explosive cartridges with appropriate detonators, and charges bore-holes. Connects detonator cord, wires, or fuses into series, and tests electrical circuits for continuity, using portable galvanometer. Lights fuse or pushes handle or button of detonator to fire blast. Starts fan or opens valves to ventilate area after blast, and sprays broken rock with water. Helps other workers to load and remove broken rock and ore to extend air, water and ventilation pipes, to back-fill worked-out areas, and to perform related duties to maintain safety and continuity of mining operations. Services equipment and makes minor repairs. Operates self-propelled diesel drilling platform or other machines, if required.

GED: 3 SVP: 5 PA: VH 2 3 4 8 EC: I 4 5 6 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 5	1 9	Y 0 1 8

7719-158 TIMBER AND STEEL-PROP SETTER (mining & quarrying)

Cuts, fits, installs, and repairs timber and steel props, headers, and other framework in underground mine:

Scales loose rock from walls and roof of work site, using scaling bar. Shovels scaled rock from working area. Directs helpers to assist with cutting, positioning, and installing supports and framework. Measures and cuts timber and steel beams for use as roof supports. Positions and secures timber and steel roof supports, using wedges, bolts, jacks, and hand and power tools. Operates portable drill to drill holes in roof and to install roof bolts, and tightens bolts with wrench. Repairs existing supports and framework. Builds chutes, ladders, manways, ventilation bulkheads, and other underground structures of wood. Builds wooden forms for concrete structures. Mixes concrete, using cement mixer, and pours concrete into wooden forms to construct floors, bulkheads, and linings for waste and ore-passes. Dismantles temporary forms and roof supports for reuse.

GED: 3 SVP: 6 PA: H 3 4 EC: I 5 6 7 DPT: 3 6 2

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 5	9 1	Y 0 8

7719-160 JACK OPERATOR (mining & quarrying)

Operates controls to move jacks (self-advancing hydraulic roof supports) and face conveyor towards face to facilitate longwall coal-shearer operations in underground mine:

Adjusts valve on each jack in row of jacks parallel to longwall face to extend hydraulic ram from jack which pushes face conveyor towards longwall coal face. Adjusts valves on jack to lower, advance, and raise adjacent jack closer to face, and repeats procedure until all jacks are advanced. Shovels broken rock or debris to facilitate movement of jacks. Services equipment and makes minor repairs.

GED: 3 SVP: 6 PA: H 4 EC: I 5 6 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C		
3 4 4 <u>3</u> 4 5 <u>3</u> 4 <u>4</u> 5	1 9	2 3 8

7719-162 STEEL ERECTOR (mining & quarrying)

Erects, repairs, and dismantles prefabricated steel-retaining forms and structures in underground mine to prepare safe working areas or to line ore chutes:

Drills and blasts rock protrusions to make room for erection of forms. Operates portable drill to drill holes in rock walls, and installs eyebolts and pulley blocks to anchor air hoist and slusher cables. Operates slusher to scrape broken rock aside. Assembles forms, using wrenches. Hooks cable to forms, and hoists them into position, using air hoist. Installs steel braces and props to strengthen and protect structures, using sledgehammer and wrenches. Installs pipes for air, water, and ventilation, and installs supporting brackets. Mixes and pours concrete to patch around forms in raises, to block holes, and to reinforce structures, using air-operated cement mixer, shovel and trowel. Installs and repairs steel ladders, guard rails, ventilation doors, and other steel structures and forms. Dismantles steel structures for reuse, using wrenches, air hoist, and oxy-acetylene torch.

GED: 3 SVP: 6 PA: VH 2 3 4 8 EC: I 5 6 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 4 5	9 1	Y 0 8 1

7719-164 SHAFT REPAIRER (mining & quarrying)

Repairs mine-shaft parts and equipment:

Inspects mine-shaft structures and conveyances for worn or defective parts. Repairs or replaces timbers, cage guides, guard rails, cables and other parts of mine shaft, using hand and power tools. Scales loose or protruding rock from shaft wall, using scaling bar. Shovels loose material from conveyances and equipment. Repairs shaft pipe lines and shaft drainage and pumping systems. Prepares reports on condition of shaft and equipment. Builds doors and brattices of canvas or wood, or erects partitions of concrete, concrete blocks or bricks. Installs timbers, bulkheads, and control chutes in ore and waste passes, if required.

GED: 3 SVP: 6 PA: H 2 3 4 EC: I 6 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 4 5 <u>3</u> 4 <u>3</u> 4 5	9 1	Y 0 8 1

7719-168 PIPEWORKER (mining & quarrying)

Installs, repairs and replaces pipes and pipe fittings for compressed-air, water, drainage pump, ventilation, back-fill and vacuum lines in underground mine:

Operates hand-held pneumatic drill to drill holes in roof or wall of mine. Installs anchor bolts and hangers or supports, using hand tools. Measures pipe, and cuts pipe to required length, using pipe cutter and saws. Threads pipes, using threading equipment. Assembles and installs piping, using wrenches. Checks pipe lines for leaks and other malfunctions. Cleans, repairs and replaces pipes, fittings and hoses. Sorts and reconditions salvaged pipe and fittings for reuse. Assists in installation of ventilation fans, pumps, and heavy electric cables. Maintains and makes minor repairs to pipe-fitting equipment. Erects work staging, using hand and power tools. Directs activities of helpers.

GED: 3 SVP: 5 PA: H 2 3 4 8 EC: I 5 6 DPT: 3 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 4 4 <u>3</u> 4 <u>3</u> 4 5	1 9	0 Y 8

7719-170 ROOF BOLTER (mining & quarrying)

Operates roof-bolting machine or portable drill to install roof-support bolts in underground mine:

Scales loose rock from roof of mine, using scaling bar. Positions safety jack to support roof until roof bolts can be installed. Drives roof-bolting machine into position, or carries portable drill to work site. Inserts drill rod into drill chuck, and starts stoper drill or roof-bolting machine. Pushes and pulls lever on roof-bolting machine or stoper drill to advance bit into roof at specified distance from rib or adjacent bolt. Removes drill rod from chuck, and inserts roof bolt into chuck. Positions restraining mesh on roof of mine, and fits plate over bolt. Inserts resin cartridge into drill hole by hand, or operates machine controls to insert resin cartridge. Moves lever on machine or portable drill to force bolt into drill hole and to puncture and release hardening

catalyst of resin cartridge. Tightens bolt to force plate against roof, and tests bolt for specified tension, using torque wrench.

GED: 3 SVP: 5 PA: H 3 4 8 EC: I 5 6 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 5 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 5	9 1 3	Y 8

7719-172 BRATTICE BUILDER (mining & quarrying)

Builds brattices (partitions) and doorways of wood, concrete, gypsum rock, canvas, or plastic to control circulation of air through passages and working areas of underground mine:

Builds permanent brattices of wood and cement to seal off abandoned areas of mine. Erects wooden frames across mine passageways, and nails canvas or plastic to framework to form temporary brattices to divert air to working areas. Constructs brattices of gypsum rock and binder in gypsum mine. Shovels debris from working area into vehicle or conveyor, installs timbers, and performs related duties to maintain safety and continuity of mining operations. Assists in installation and maintenance of ventilation fans and pipes, if required.

GED: 3 SVP: 4 PA: H 3 4 EC: I 5 6 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 5 <u>3</u> 4 <u>3</u> 5	1 3	Y 8

7719-174 LAMP KEEPER (mining & quarrying)

Repairs and issues electric and safety lamps used by underground-mine workers:

Issues lamps at start of shift, and receives returned lamps at end of shift. Cleans lamps and batteries, using rags, steel brushes, and compressed-air jet. Inspects lamps for malfunctions, and replaces defective or worn cables, bulbs, wicks and glass, using hand tools and soldering iron. Tests battery strength, using battery tester. Recharges weak batteries, using electric battery charger. Fills battery cells with chemicals and distilled water, and fills safety lamp reservoirs with fuel. Records repairs to lamps. Issues methanometers and emergency breathing devices to coal miners at start of shift.

GED: 3 SVP: 3 PA: L 4 EC: I DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 3 5 <u>3</u> 3 <u>3</u> 5 4	1 3	2 0 Y

7719-178 NIPPER (mining & quarrying)

Loads, drives and unloads electric or diesel-powered mine car to transport materials to and from working face of mine, shaft station, or outside of mine:

Loads drill steel, steel arches, timbers, roof bolts, blasting poles, winches, explosives, and other materials and equipment into mine car. Drives mine car to working face or underground magazine, and unloads materials. Loads scrap materials and damaged explosives into mine car at working face or along roadway, and transports them to shaft station or to outside of mine. Helps tram crews to open and close ventilation doors, and to turn switches to divert cars. Helps tram crews to re-rail cars, using hydraulic jacks and prybars. Replenishes supplies

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in underground stores. Drives battery-powered electric mine car into charging station at end of shift, and connects car to battery charger. Services equipment and makes minor repairs.

GED: 2 SVP: 3 PA: VH 3 4 EC: I 6 7 DPT: 6 8 3

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 4 5 3 4 3 3 5	1 3 9	2 3 Y 8

7719-180 PIPEWORKER HELPER (mining & quarrying)

Helps pipeworker to install, repair and replace pipes and pipe fittings in underground mine:

Operates hand-held pneumatic drill to drill holes in roof or wall of mine. Installs anchor bolts and hangers or supports, using hand tools. Measures pipe, and cuts pipe to required length, using pipe cutter and saws. Threads pipe, using threading equipment. Helps pipe worker to assemble and install piping, using wrenches. Cleans, repairs, and replaces pipes and fittings as directed. Stores tools and materials. Cleans work area. Erects work staging, using hand and power tools. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 3 PA: H 2 3 4 8 EC: I 5 6 DPT: 6 6 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 3 4 4 3 4 3 4 5	1 3 9	2 3 8

7719-182 MINER HELPER (mining & quarrying)

Helps workers engaged in mining operations:

Supplies workers with materials, tools and equipment. Assists in erecting, dismantling, and removing timber or steel retaining structures, using hand tools. Scales loose rock from walls of working area in drift, stope or raise, using scaling bar. Operates slushing machine or uses pick and shovel to remove broken rock from floor of mine. Helps to install air, water and ventilation pipes, and other underground fixtures. Assists in drilling, loading, and tamping blast holes, and in connecting blasting fuses or wires. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 3 PA: VH 2 3 4 EC: I 5 6 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 4 5 3 4 3 3 5	1 3 9	2 3 8

7719-186 TIMBER AND STEEL-PROP SALVAGER (mining & quarrying)

Salvages timber and steel props and headers from worked-out areas of underground mine for reuse at working face:

Positions and raises jacks beside timber or steel props to support roof of mine. Pries and hammers timber headers and props to loosen them. Removes bolts from steel headers and props, using wrench, mall and prybar. Moves to safe area, and pulls cable which releases jacks. Removes timber and steel props and headers, and carries them to working face for reuse.

GED: 2 SVP: 3 PA: VH 3 4 EC: I 6 7 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 5 4 4 5 3 4 3 3 5	1 3	2 3 8

7719-190 BACK-FILLER (mining & quarrying)

Tends equipment that fills worked-out areas of underground mine with slurry of sand or tailings to prevent sinking or cave-in of surrounding ground:

Opens pipe valves or gates, and notifies pump operator by telephone or intercom system to start flow of water and sand or tailings into abandoned workings. Changes position of pipe discharge or adjusts valves during back-filling to allow slurry to settle and water to drain from slurry. Closes valve when fill reaches level required to support walls. Plugs holes and cracks in restraining structure with burlap to prevent slurry from draining with water. Notifies pump operator to add cement to slurry and to pump mixture through pipe. Opens valve to permit cement mixture to cover fill to form permanent crust. Notifies pump operator to flush out pipes with water when back-filling has been completed. Monitors pressure gauges during back-filling and records readings, if required. Checks pipes and valves for leaks, and repairs or replaces damaged segments or parts, using hand tools.

GED: 2 SVP: 3 PA: M 2 3 4 EC: I 4 6 7 DPT: 6 6 5

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 4 5 4 4 4 4 5	1 3 9	2 3 8

7719-192 SANITARY NIPPER (mining & quarrying)

Empties and cleans toilets in underground mine:

Checks toilet facilities regularly to ensure they are maintained to company and government health standards. Removes collection cans from stationary toilets, and seals cans. Loads cans onto cart or vehicle. Pushes cart or drives vehicle to cage station, and helps to transport cart and latrine rail cars to surface. Pushes cart and latrine rail cars to sewage disposal, and dumps contents. Sprays collection cans and latrine rail car tanks with water, steam or compressed air. Places chemicals and deodorizers in cans and tanks, and assists in transporting them to original location. Replenishes expendable supplies, and disposes of garbage. Sweeps, mops and tidies toilet areas. Makes minor repairs to toilets, and notifies supervisor when major repairs are required.

GED: 2 SVP: 2 PA: M 3 4 EC: I 4 6 7 DPT: 6 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 5 4 5 4 5 4 4 5	1 3	2 3

Other Mining, Oil and Gas Field Occupations

7719-210 through 7719-299

7719-210 DOWSER (bus. serv.)

Analyzes movements of divining rod to predict presence, depth, and quantity of water in sub-soil:

Observes surface features of land or geological formations, or studies geological maps or reports to determine probability of water in area to

be dowsed. Holds divining rod in both hands parallel to ground, and walks over area where water is expected to be found. Analyzes twists, bends, and vibrations of divining rod to predict presence, depth, and quantity of water. Drives stake into ground to mark probable location of water, and records location on map.

GED: 3 SVP: 5 PA: L 4 EC: O DPT: 2 8 7

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 <u>3</u> 4 4 4 4 4 5	1 3 9	9 2

7719-214 BRINE-WELL TENDER (mining & quarrying)

Tends pumps to maintain brine wells at specified levels and concentrations to ensure adequate supply of salt for processing plant:

Turns valves and monitors gauges and water-pressure recorders to maintain flow and strength of brine within prescribed limits, and to reverse flow of water to flush brine wells. Measures specific gravity of brine, using hydrometer, or takes samples of brine for laboratory analysis. Records strength, fluid pressure, and volume of brine. Monitors pumping operation to detect malfunctions, and inspects system for broken or frozen lines, stoppages or leaks. Services equipment and makes minor repairs. Drives truck between wells, if required.

GED: 3 SVP: 4 PA: L 4 EC: B DPT: 3 8 5

APT.	INT.	TEMP.
G V N S P Q K F M E C 3 4 4 4 <u>4</u> 4 4 4 4 5	3 1 9	2 Y

7719-218 OBSERVER HELPER, GRAVITY PROSPECTING (oil & nat. gas)

Helps gravity-prospecting observer to record gravity measurements which indicate potential source of petroleum deposits:

Packs delicate instruments in protective casings for transport in vehicle over rough terrain. Drives vehicle to transport prospecting personnel and equipment to work site. Unloads equipment, and carries instruments to designated area. Positions and adjusts gravity meter, torsion balance, and other gravity-measuring instruments as directed. Reads thermometer and barometer, and records readings. Helps to repair gravity-measuring instruments. Services vehicle and makes minor repairs. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 3 PA: M 3 4 EC: O DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 4 <u>4</u> 4 4 4 3 5	1 3 9	2 Y

7719-220 VIBRATOR OPERATOR, SEISMIC PROSPECTING (oil & nat. gas)

Operates vibrator unit to create seismic waves in geophysical explorations for oil and natural gas:

Drives vehicle equipped with vibrator unit to work site. Manipulates vehicle controls to position vibrator pad on ground and to apply pressure on pad. Starts vibrator motor, and adjusts controls to set sweep length of vibrator and frequency of vibrations, according to radio instructions received from observer in recording vehicle. Monitors dials and pressure gauges to ensure that correct hydraulic pressure is maintained. Services vehicle and vibrator unit, and makes minor repairs.

GED: 2 SVP: 3 PA: L 4 EC: I 5 DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 5 <u>4</u> 5 4 4 4 3 5	1 3 9	2 3 Y

7719-222 OBSERVER HELPER, SEISMIC PROSPECTING (oil & nat. gas)

Positions and connects seismometers, working as member of seismic-prospecting crew:

Loads seismometers, portable recorders, and other equipment onto truck, and drives truck to work site. Unloads seismometers, portable recorders, and other equipment from truck, and carries equipment to location designated by supervisor. Unreels and connects electrical cables between seismometers and portable recorder or recording equipment in truck. Operates controls in boat during marine seismic exploration to unreel and retrieve detectors or hydrophones as directed by supervisor. Maintains and makes minor repairs to seismometers and other equipment. See also definition for term title, 02-160 HELPER (any ind.).

GED: 2 SVP: 2 PA: M 3 4 EC: O DPT: 6 8 4

APT.	INT.	TEMP.
G V N S P Q K F M E C 4 4 4 <u>4</u> 4 5 <u>3</u> 4 4 3 5	1 3 9	2 Y

7719-299 MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with mining and quarrying including oil and gas fields, and related occupations not presently classified in Unit Group 7719.

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 work-over-rig operator (oil & nat. gas) 7711-138
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YARD ATTENDANT, LIVESTOCK (slaught. & meat pack.;
 whole. trade) 7187-142
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 yardman, livestock (slaught. & meat pack.; whole. trade) 7187-142
 yard supervisor (mining & quarrying) 7710-199
 zoo attendant (agric; amuse. & rec.) 7199-158
ZOO FOREMAN/WOMAN (agric.; amuse. & rec.) 7180-154
 zoo keeper (agric; amuse. & rec.) 7199-158



GUIDE TO QUALIFICATIONS PROFILE FACTORS

PHYSICAL ACTIVITIES (PA)

1. Strength (lifting, carrying, pushing, pulling) shown in terms of:
 S – Sedentary work (10 lbs. max)
 L – Light Work (20 lbs. max)
 M – Medium work (50 lbs. max)
 H – Heavy Work (100 lbs. max)
 VH – Very Heavy Work (over 100 lbs.)
2. Climbing and/or Balancing
3. Stooping, Kneeling, Crouching and/or Crawling
4. Reaching, Handling, Fingering and/or Feeling
5. Talking
6. Hearing
7. Seeing, in terms of: acuity far and near, depth perception, accommodation, colour vision and field of vision.
8. Controls: Operating machinery requiring the use of body members and eye-hand foot co-ordination.
 Hand-Arm: Controlling the operation of machinery using only hand(s) and arm(s).
 Foot-Leg: Controlling the operation of machinery using only the leg(s) and one or both feet.
 Eye Hand Foot Co-ordination: Controlling the operation of machinery requiring the co-ordination of movement of the hand and foot with each other in accordance with visual stimuli.

ENVIRONMENTAL CONDITIONS (EC)

1. Work Location
 I – Inside
 O – Outside
 B – Both
2. Extremes of cold plus temperature changes
3. Extremes of heat plus temperature changes
4. Wet and/or humid
5. Noise and/or vibration
6. Hazards, in terms of:
 – mechanical
 – electrical
 – burns
 – explosives
 – radiant energy
 – heights
 – dangerous footing
7. Atmospheric Conditions, in terms of:
 – fumes
 – odours
 – dusts
 – mists
 – gases
 poor ventilation

WORKER FUNCTIONS (DPT)

The three broad categories of functional relationships to Data, People and Things are as follows:

DATA (1st digit)	PEOPLE (2nd digit)	THINGS (3rd digit)
0 Synthesizing	0 Mentoring	0 Setting-Up
1 Co ordinating	1 Negotiating	1 Precision Working
2 Analyzing	2 Instructing	2 Operating-Controlling
3 Compiling	3 Supervising	3 Driving-Operating
4 Computing	4 Diverting	4 Manipulating-Operating
5 Copying	5 Persuading	5 Tending
6 Comparing	6 Speaking Signalling	6 Feeding-Offbearing
7	7 Serving	7 Handling
8 No Significant Relationship	8 No Significant Relationship	8 No Significant Relationship

* The functional digit 7 is not used in the Data Table in the CCDO.

GENERAL EDUCATIONAL DEVELOPMENT (GED)

Levels	Approximate Duration of Schooling
6	17 years plus
5	13 to 16 years
4	11 to 12 years
3	9 to 10 years
2	6 to 8 years
1	Up to 6 years

SPECIFIC VOCATIONAL PREPARATION (SVP)

- | | |
|---------------------------------------------------------------------|-----------------------------------------------|
| 1 – Short Demonstration Only | 5 – Over 6 months up to and including 1 year |
| 2 – Anything Beyond short demonstration up to and including 30 days | 6 – Over 1 year up to and including 2 years |
| 3 – Over 30 days up to and including 3 months | 7 – Over 2 years up to and including 4 years |
| 4 – Over 3 months up to and including 6 months | 8 – Over 4 years up to and including 10 years |
| | 9 – Over 10 years |

APTITUDES

Aptitude Factors	
G	General Intelligence
V	Verbal Ability
N	Numerical Ability
S	Spatial Perception
P	Form Perception
Q	Clerical Perception
K	Motor Co ordination
F	Finger Dexterity
M	Manual Dexterity
E	Eye-Hand Foot Co-ordination
C	Colour Discrimination

Aptitude Levels

(in terms of working population)

- 1 Upper 10%
 - 2 Upper Third exclusive of the Highest 10%
 - 3 Middle Third
 - 4 Lowest Third exclusive of the Lowest 10%
 - 5 Lower 10%
- When these levels are underlined, they are considered significant for satisfactory job performance.

INTEREST FACTORS

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1. Things and Objects | vs. 6. People and Communication of Ideas |
| 2. Business Contact with People | vs. 7. Scientific and Technical Work |
| 3. Routine, concrete and organized work | vs. 8. Abstract and creative work or experiences |
| 4. Working for people for their presumed good as in the social welfare sense, or for dealing with people and language in social situations. | vs. 9. Non-social work, carried on in relation to processes, machines and techniques |
| 5. Work resulting in prestige or esteem of others | vs. 0. Work resulting in tangible, productive satisfaction |

TEMPERAMENT FACTORS

- | | |
|---------------------------------|--------------------------------------------------------------|
| 1. Variety and Change | 7. Influencing People |
| 2. Repetitive, Short Cycle | 8. Performing Under Stress |
| 3. Under Specific Instructions | 9. Sensory or Judgmental Criteria |
| 4. Direction, Control, Planning | 0. Measurable or Verifiable Criteria |
| 5. Dealing with People | X. Interpretation of ideas, facts, feelings |
| 6. Isolation | Y. Precise attainment of set limits, tolerances or standards |

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